

delivered in a typical "Plan View" (dependant upon sheet contents) in view 1. ADOT cells are not to be modified unless approved by ADOT.

All final Consultant project Electronic CADD data files may be delivered through a File Transfer Protocol (FTP) Site. Alternatively, two (2) copies of the electronic files shall be submitted on CD-ROM/DVD (multiple CDs /DVDs shall be allowed). All final project documentation, electronic files (.DGN, ASCII, .ALG, .DTM, .SGN, .XLS project wide reference files, etc.) and hard copy, shall be packaged separately, suitably labeled and delivered to the assigned ADOT primary Project Manager, and/or to the Technical Leader as identified.

All deliverables shall contain an electronic Index of Files and a letter of transmittal to the designated areas and all CDs/DVDs must be labeled with the information stated below:

Identification Label for CD/DVD and Case:

- Prepared By:
- Federal Project Number:
- Route:
- Milepost (Beginning/Ending):
- Prefix (Rt, Co, MP) and TRACS Number:
- Project Name:
- Type of Files:
- Creation Date:
- Disc (#) of (total #)

In addition to the requirements stated above in the General Specifications, all designers of ADOT projects shall provide the information requested by the individual areas. If unclear about items needed for your project, please contact the Design Project Manager.

## **1050 Value Analysis**

"Value Analysis", also know as "Value Engineering" consists of those tasks performed by a Value Analysis Team in accordance with the Value Analysis Program Manual as referenced in Section 200 of the Scope of Work and available from the ADOT Value Analysis Section. Any studies or other activities of a similar nature shall not be referred to as "Value Analysis" or "Value Engineering."

The design team is encouraged to recommend value analysis for ADOT standards and specifications, as well as for elements of the project.

## **1051 Value Analysis Team**

The value engineering study will be performed by a value analysis team consisting of ADOT personnel, personnel from consultants or outside agencies, or some combination of these sources. The design team shall cooperate fully with the value analysis team, providing necessary background information for the study. At the discretion of the Project Manager, the design team may be requested to assign one of its representatives to the value analysis team.

**1052      Design Team Responsibilities**

- A. The design team, upon notification of the approval of a value analysis, shall compile appropriate data for analysis and make a presentation to the value analysis team, in accordance with the Study Plan prepared by the Value Engineer. The design team shall communicate and cooperate fully with ADOT's Value Engineer and the value analysis team.
- B. It is expected that the elements necessary for a value study can be assembled and delivered by the design team with minimum expenditure of effort and time under its normal design procedures in approximately four (4) working days. The design team will be allowed to budget thirty-two (32) man-hours for data compilation, the presentation, and study response, if appropriate. If the design team is requested to furnish a representative to participate as a member of the value analysis team, additional hours may be necessary. Although costs for value analysis activities are not identified as a separate expense item for accounting purposes, the design team shall report the hours expended and estimated costs of labor and materials to the ADOT Value Engineer for cost tracking and value analysis program evaluation purposes.
- C. In accordance with the Program Manual, the findings and recommendations of the value study will be forwarded to the ADOT Project Manager for review. The Project Manager will review the value analysis recommendations with the project team and respond to the Value Analysis section as soon as practical indicating acceptance, possible acceptance pending further investigation, or rejection of each recommendation. The design team shall implement the approved recommendations of the value study. If significant effort is required, the additional work will be added to the Scope of Work by contract modification.

**1060      Reviews and Submittals**

- A. Review and coordination of the Consultant's work by ADOT will continue through the project development process. The Consultant may continue the design work while design submittals are being reviewed by ADOT. Doing so however in no way relieves the Consultant of the responsibility to incorporate review comments into the design, nor does it entitle the Consultant to any additional design fees as a result of making changes due to review comments.
- B. Partnering Workshops
  - 1. If requested by ADOT, the Consultant shall participate in joint progress meetings and consensus sessions with other designers on the corridor.
  - 2. The Consultant shall participate in a Construction Partnering Seminar after the project has been awarded and prior to the start of construction.
- C. Submittals for review shall be made when the studies and/or plans have been developed to the following levels of completion:
  - 1. Quality Control Plan
  - 2. Stage I design
  - 3. AASHTO Report
  - 4. Stage II design

5. Stage III design
  6. Stage IV design
- D. The project may be subject to a constructability review. The Resident Engineer or other assigned District representative will be the leader of the constructability review which would normally occur after the Stage III submittal and before the Stage IV submittal.
- E. Copies of review submittals and finalized documents shall be distributed by the Consultant in accordance with the Distribution List maintained by the Statewide Project Management Section (see Appendix C) or as per the ADOT Project Manager's instructions. The appropriate name for each position may be obtained from the ADOT Project Manager upon request one week prior to any submittal deadline. All deliveries shall be by hand or overnight courier. All plans and cross sections shall be half-size black and white sheets and in CD-ROM/DVD containing the CADD (Microstation) design files used to develop the plan sheets as specified in Section 1040.

**1061 Environmental Reports - N/A**

**1062 Stage I Design Submittal**

An informal review and discussion of the project shall be held prior to the Stage I review submittal. The meeting shall take place as soon as the Consultant has established pre-initial roadway alignment, typical roadway sections, and a tentative plans layout for the project.

The attendees shall consist of the Consultant, the assigned design team including ADOT staff involved in the project design, the ADOT Project Manager and other concerned personnel invited by the ADOT Project Manager.

- A. The following material shall be developed and submitted to the ADOT Project Manager for review:
1. Initial typical roadway sections
  2. Initial roadway plan and profile sheets at the scales set in Section 410.
  3. Tentative plans layout
  4. Initial environmental mitigation measures
  5. Request for utility designation services
  6. Two copies of all plans and cross sections; one set shall be half-size black and white sheets and the other set in PDF format.

**1063 Stage II Design Submittal**

- A. The following material shall be developed and submitted for review:
1. Typical roadway and detour sections

2. Final roadway geometry and preliminary roadway and detour plan and profile sheets
  3. Location of existing utilities and identification of initial utility conflicts
  4. Utility report
  5. Preliminary R/W and easement requirements
  6. Preliminary roadway drainage plans and details and Initial Roadway Drainage Report
  7. Bridge Drainage Report
  8. Bridge Selection Report
  9. If required, draft applications for environmental permits including preliminary input for Section 404 permit
  10. Any significant change in engineering data supporting previous environmental decisions or applications
  11. Preliminary summary of required environmental mitigation measures
  12. Preliminary Landscape Architectural plans with proposed sources of power and water
  13. Preliminary development of intersection plans including basic geometry and channelization
  14. Preliminary layouts for proposed retaining and sound barrier walls
  15. Preliminary construction sequencing plans
  16. Final Geotechnical Report
  17. Final survey information
  18. Initial quantities and cost estimate
  19. Preliminary roadway cross sections at one hundred (100) ft. intervals, as a minimum, with additional sections at breaks in the terrain. See Section 440, Roadway Design.
  20. Preliminary summary of earthwork quantities
  21. Two copies of all plans and cross sections; one set shall be half-size black and white sheets and the other set in PDF format.
- B. The Geotechnical Report shall be submitted to ADOT for review and approval a minimum of fifteen (15) calendar days prior to the Stage II Design Submittal.

#### **1064            Stage III Design Submittal**

- A. The following material shall be developed and submitted for review:
1. Final typical roadway and detour sections

2. Pre-final roadway and detour plan and profile sheets
3. Identification of final utility conflicts and preliminary plans of utility installations and/or re-locations to be included in project construction
4. Pothole data made available to utility companies
5. Utility report
6. Final R/W and easement requirements
7. Pre-final roadway drainage plans and details and Final Roadway Drainage Report
8. Completed applications for environmental permits including final input for Section 404 permit
9. Any significant change in engineering data supporting previous environmental decisions or applications
10. Final summary of required environmental mitigation measures
11. Pre-final intersection plan sheets
12. Final construction sequencing plans
13. Pre-final layouts for retaining and sound barrier walls
14. Preliminary landscape architectural plans, summaries and details, and proposed sources of water and power
15. Preliminary design sheet with index and general notes, summary sheets and special details
16. Preliminary summary sheets
17. Preliminary special details
18. Preliminary bridge structure plans
19. Preliminary retaining wall and sound barrier wall design plans
20. Preliminary traffic control plans
21. Preliminary pavement marking and signing plans
22. Preliminary traffic signal plans
23. Preliminary lighting plans
24. Preliminary erosion control plans, summaries and details
25. Preliminary special provisions including ADOT Stored Specifications
26. Preliminary quantities, cost estimate and bidding schedule

27. Preliminary construction schedule in bar chart format
28. Preliminary roadway cross sections at one hundred (100) ft. intervals, as a minimum, with additional sections at breaks in the terrain. See Section 440, Roadway Design.
29. Preliminary summary of earthwork quantities
30. Preliminary Utility Special Provisions
31. Two copies of all plans and cross sections; one set shall be half-size black and white sheets and the other set in PDF format.

An office review and field review will be held following submittal of the Stage III plans to review the proposed roadway alignments and bridge site. See Section 410 of this Dictionary of Standardized Work Tasks for field review staking requirements.

#### **1065            Stage IV Submittal**

- A. The following final material shall be completed, checked and submitted for review:
  1. Design sheet(s) with index and general notes
  2. Summary sheets
  3. Special details
  4. Typical roadway and detour sections
  5. Roadway and detour plan and profile sheets
  6. Drainage plans and details
  7. Intersection plans and details
  8. Construction sequencing plans
  9. Traffic control plans
  10. Traffic signal plans
  11. Signing and pavement marking plans
  12. Lighting plans
  13. Bridge plans
  14. Retaining wall and sound barrier wall design plans
  15. Landscape Architectural plans and details
  16. Utility installation/relocation plans and details to be included in project construction

17. Utility report
18. Utility Special Provisions
19. Utility relocation schedule and costs
20. Erosion control plans
21. Roadway cross sections (see Section 440, Roadway Design)
22. Final summary of earthwork quantities
23. Quantities, cost estimate and bidding schedule (provide the work done using Microsoft Excel in one hard copy and another in a CD-ROM)
24. Special provisions (provide hard copy and CD-ROM using Microsoft Word)
25. Construction schedule
26. Environmental permits
27. Summary of environmental mitigation measures and disposition
28. Final design calculations
29. Two copies of all plans and cross sections; one set shall be half-size black and white sheets and the other set in PDF format.

NOTE: The ADOT technical reviewer may require checked computations and checked data on the plans for all of these items prior to submittal.

B. ADOT's review of the submittal will include technical content, incorporation of previous comments, and completion of design and details, as well as:

1. Conformance with ADOT requirements
2. Completeness of the contract documents
3. Compatibility of plans, specifications, and special provisions
4. Coordination between disciplines, phases, and outside parties
5. Clarity of the contract documents
6. Consistency of presentation

If additional submittals at this level are required due to noncompliance with the Scope of Work or ADOT's review comments, the work shall not entitle the Consultant to any additional design fees.

The Consultant shall prepare and submit to U & RR Section, a Utility Clearance Letter in the style and manner as outlined in the *Utility Coordination Guide for Design Consultants*. The clearance letter shall be sent before the Final Submittal is made.

**1066 Final Submittal**

A. The following material shall be submitted for completion of the project:

1. A complete reproducible set of sealed and signed contract document originals necessary to construct the road and/or bridge improvements identified in the contract.
2. A complete sealed and signed reproducible set and one copy of special provisions to cover design items not identified in the ADOT Standard Specifications for Road and Bridge Construction, current edition.
3. The Consultant shall provide a copy, in electronic version, of the CADD design files used to create all plan sheets as specified in Section 1040. The Consultant shall also provide a separate CD/DVD containing all plan sheets, properly sealed by a Registered Engineer, in PDF format. Filenames shall conform to the format provided by ADOT in section 1040 and/or required by any ADOT technical section.
4. Final and complete quantity summaries and cost estimates
5. An estimate of the contract time for the project construction
6. Final survey computations and original field books
7. Approved environmental permits if required
8. A reproducible set of earthwork cross sections by station showing the plotted roadway template superimposed on the plotted natural terrain (see Section 440, Roadway Design)
9. A reproducible set of final earthwork quantities, calculations and overall summaries
10. Return any documents and other materials provided for use on the project

**NOTE.**- The Consultant Project Manager will make sure that the printed copies comply with the following list:

1. All seals must be of reproducible quality and all signatures in black ink.
2. All final plan sheets shall be trimmed to 22" by 34".
3. All final plan sheets shall be printed on 20 pound vellum not less than 3 mil nor more than 5 mil.
4. Printed plan sheets shall be black printing only.
5. Do not use paste-ups, tape or sticky back.
6. Do not use pencil on final drawings.

All review submittal prints of the construction plans shall be clearly stamped "**PRELIMINARY - NOT FOR CONSTRUCTION**". The percentage of completion and date submitted should be clearly evident.



Failure to comply may be cause for rejection of the submittal. Only the final approved plans shall be properly sealed by an Arizona Registered Professional Engineer and issued without the above stamped notation.

## APPENDIX C

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**200 LOCAL GOVERNMENT PROJECT DEVELOPMENT PROCESS**


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This guide has been developed by the Arizona Department of Transportation (ADOT) to assist Metropolitan Planning Organizations (MPO), Councils of Government (COG), and sponsoring local agencies with developing, designing, funding, and administering local government projects that include Federal funds. Projects are processed and administered in accordance with established Federal Highway Administration (FHWA) and ADOT guidelines and requirements.

**210 DESIGN CONSULTANT**

If Federal funds are used for design costs and a design consultant is contracted, the local agency must have their consultant procurement process approved prior to negotiating a contract. Additionally, no work can be performed by the consultant until Federal funds for design have been authorized. The time required to obtain Federal obligation for design is dependent on the procurement process of the Local Agency.

Upon receipt of a request from a local agency to use Federal-aid money for design and approval to procure a design consultant, the Local Government Section will verify the project qualifies for design reimbursement. The project must be listed in the MPO/COG Transportation Improvement Program (TIP) and the State Transportation Improvement Program (STIP). The TIP should have a line item identifying funding for design or construction and design.

The ADOT Engineering Consultants Section (ECS) reviews and approves local agency design consultant procurement processes prior to the local agency advertising for a consultant. Typical procurement processes evaluated include:

- Pre-qualification – establish a mailing list of firms pre-qualified to perform professional engineering services required by the local agency.
- Approval to Advertise – obtain authorization to advertise from ADOT.
- Advertise – adhering to a process which provides for maximum free and open competition, two notices requesting submittal of proposal packets are published in a single newspaper or multiple newspapers of general circulation within the state and an accumulated general circulation of not less than 50,000 subscribers. The official notices are normally placed in the Legal Advertising section, not less than six nor more than ten calendar days apart.
- Request for Proposal (RFP) – Preparation of an RFP which includes the intent of advertisement, such as, request for preliminary engineering services, scope of work, statement of qualification (SOQ) due date, and number of copies required. If SOQ addendums are necessary, information must be provided to all firms that obtain a copy of the SOQ package. Acknowledgement of receipt must be included in proposal package. Evaluation criteria and weighting factors identified. Qualifications based selection process does not allow costs as a factor. Oral interviews identified if applicable.
- Evaluation of Proposals – Prior to accepting a firm for consideration, the firm must comply with SOQ requirements. Proposals are to be evaluated by a panel of qualified members who are familiar with the project and intent of the contract. Evaluation should be based on proposal evaluation factors identified in the SOQ. Panel scores are compiled to arrive at average scores for each proposer. The highest ranked firm will

be considered the most qualified. To be considered for selection, a firm must receive an overall ranking of 70% or above. Approval is obtained to begin negotiations with the most qualified firm. Verify that prime and sub-consultants are not currently debarred and/or suspended and excluded from participation in Federal programs. A reference website is [www.epls.gov](http://www.epls.gov). If satisfactory contract negotiations are not reached, the agency may go to the next ranked firm.

Additional information may be obtained by contacting ECS at 602-712-7532

Following ADOT approval of the procurement process, a local agency advertises, selects a consultant, and negotiates fee. A copy of the executed contract with the design consultant should be submitted to the ADOT project manager. ADOT will then initiate an Intergovernmental Agreement (IGA) with the local agency for the reimbursement of Federal funds.

Once the Federal funds are authorized and the IGA executed, ADOT transmits a Notice to Proceed to the local agency. Federal funds can not be used for any work occurring prior to authorization to proceed.

## **220 LOCAL GOVERNMENT PROJECT MODEL (STP, CMAQ, BR, HES)**

*Local agencies are required to follow the ADOT project development process in the development and design of local government projects. The typical project will take 18 to 24 months to proceed through the process from the submittal of a design concept report to bid advertisement. The environmental determination can greatly impact the project schedule. Typical environmental determinations take 10 to 12 months from initial submittal to environmental clearance. Contact the Local Government Section for information regarding the project model and the scheduling process for various types of construction projects.*

Requests for bridge funding should be prepared in accordance with section 400 of this manual. Bridge projects require the submittal of a Structure Selection Report, after the Design Concept Report has been approved.

Safety project requests for Hazard Elimination (HES) funds should be prepared in accordance with section 300 of this manual. Project requests will be reviewed and a determination made regarding HES funding eligibility prior to the submittal of a Design Concept Report. HES projects must be shown as an approved project in the MPO/COG Transportation Improvement Program (TIP) and the Arizona Statewide Transportation Improvement Program (STIP).

## **230 PROJECT DEVELOPMENT MILESTONES**

Each Metropolitan Planning Organization (MPO) and Council of Governments (COG) submits their Local Government Federal-aid Multi-Year Highway Construction Program to ADOT's Transportation Planning Division for inclusion in the Statewide Transportation Improvement Program (STIP). The goal of the STIP is for projects to be planned, programmed, and developed in accordance with federal-aid procedures and ADOT's Project Management and Scheduling process; federal-aid obligated; the project advertised for bid; and construction started in the fiscal year that the project is programmed. In order to accomplish this, the following tasks must be completed by the project sponsor.

## **231 PROJECT ASSESSMENT**

Projects are typically programmed in the fifth year of the Local Government Program. A project assessment including a detailed cost estimate and project schedule based on the Local Government Section model is to be prepared and submitted to the MPO or COG for prioritizing and programming. This activity is required to ensure that sufficient pre-engineering of the project is conducted to determine a reliable cost estimate for the project and a schedule is prepared that outlines project development in order to meet the local jurisdiction's desired construction start date.

## **232 DESIGN CONCEPT REPORT AND PROJECT SCHEDULE**

Prior to the preparation of a Design Concept Report, project sponsors should contact the ADOT Local Government Section and schedule a pre-design conference for a project. A project manager will be assigned to meet with the local agency and their design consultant to review the project scope, the schedule for the development of the project, the project budget and cost, and the design concept report guidelines for report format. All design concept reports must include a completed project schedule and detailed cost estimate based on the format provided at the pre-design conference.

ADOT uses the critical path method of scheduling for all highway construction projects. The Local Government project model was designed using a typical eighteen to twenty-four month project development duration. The total duration can be modified to meet the sponsor's needs for the type of project being developed.

As an example, projects that are predominately Intelligent Transportation System (ITS) improvements can be shortened with respect to the number of stage submittals if the project team concurs. However, all projects are required to follow the ADOT clearance process including environmental, utilities, and right-of-way processing requirements. As such, the project development will be a minimum 10 to 12 months, or as long as it takes to receive an environmental clearance.

When using the project model in determining a scheduled bid advertisement date for a project, it is advised to start with the construction start date that is anticipated and work backwards through the model to determine when project development should start to achieve a realistic project development schedule. The expected construction start date is approximately two and one half months after the bid advertisement date.

## **233 PROJECT DESIGN REVIEW COSTS**

Local governments should execute an intergovernmental agreement with ADOT that outlines procedures for ADOT to recover the design review and bid package preparation costs incurred by ADOT to administer the development and advertisement for bid of local highway construction projects. ADOT has no financial involvement in any local government project and must recover its cost to administer local projects in accordance with federal requirements.

Local Government Section will request from Administrative Services Division, a federal-aid and TRACS project number after a pre-design conference has been held. A determination will be made by Local Government Section of the estimated design review and bid preparation costs for the project based on the detailed cost estimate provided in the design concept report. The project sponsor will receive a letter from Accounts Receivable Section of Administrative Services Division requesting that the sponsor send to ADOT the amount requested within 30 days. Based on review of historical costs to administer local government projects, a minimum of \$10,000.00 will be required for all projects. The estimated cost for any project will be determined using a design review cost estimate graph established from historical project data and may vary from what is shown on the graph based on the type and complexity of the proposed improvements for the project, right-of-way acquisition, utility relocation, environmental analysis requirements, and local agency and consultant experience with federal-aid

procedures. Should project design review costs exceed the deposit during development of a project, Accounts Receivable Section will invoice the local agency for the estimated costs determined by Local Government Section to complete development of the project. At the conclusion of the preliminary engineering phase of the project, a final accounting of design review project costs will be made. The local agency will be informed by letter from Accounts Receivable Section of the final design review costs for the project. If any additional funds are required, a request for those funds will be included in the letter. Failure to provide ADOT with funds for technical review within 30 days, may jeopardize the continued development of a project.

## **234 ENVIRONMENTAL DETERMINATION**

All federal-aid projects require an environmental analysis and an Environmental Clearance certification. The project sponsor is responsible for obtaining all needed information and data, and preparing reports in accordance with ADOT format. The format and additional information is available on the ADOT website and in the appendix of this manual. The final Environmental Clearance will be issued by ADOT or FHWA. A letter identifying the type of environmental determination and information required for analysis will be sent by the Local Government Section NEPA Planner to the project sponsor. The analysis of information provided by the project sponsor for projects that meet Categorical Exclusion requirements will be prepared by ADOT. All other environmental analysis work is the responsibility of the project sponsor. Preliminary engineering work can be completed through 30% project design, but Environmental Clearance must be obtained prior to final design work being started.

## **235 RESERVED FOR FUTURE USE**

## **236 STAGE SUBMITTALS**

Requirements for the Stage II, III, IV, and PS&E project submittals are described in ADOT's Project Management Manual and are presented in the Appendix.

Include with the Stage II submittal, copies of letters sent to affected utility companies requesting the status of utility conflicts and a request for utility relocation schedule for ADOT review. If Right-of-Way acquisition is required, coordinate utility relocation work with the R/W process to ensure that the utility relocation work will not delay the project from advertising on schedule.

Submit the Right-of-Way Clearance request letter on the R/W Section form. R/W Clearance is required Whether or not right-of-way is being acquired. If federal funds are being used for design or right-of-way acquisition, right-of-way acquisition CANNOT be initiated until the Environmental Clearance has been obtained.

Project cost estimates are to be formatted using ADOT standard bid item numbers and quantities are to be listed according to the basis of payments criteria identified in the current ADOT Standard Specifications for Road and Bridge Construction. Should cost estimates exceed the budget for the project during project development, the local jurisdiction will be responsible for the additional cost. It is recommended that sponsors utilize ADOT construction standards and material specifications. These have been approved by FHWA for use on federal-aid projects. ADOT Standards can be used by reference in the project plans. Other construction standards can be used, but require ADOT review and approval and must have the details shown in the project plans. Materials specifications other than ADOT's must be modified from ADOT's Standard Specifications in the project Special Provisions.

Format for reports, clearance letters, cost estimates, and Special Provisions can be obtained from Local Government Section. Construction plans shall be formatted in accordance with ADOT's drafting guidelines.

## **237 FINAL PLANS PACKAGE**

Special Provisions shall be prepared in accordance with ADOT format and submitted on a floppy disk or CD. Typically, the ADOT Contracts & Specifications Section will need at least one month to prepare a PS&E bid package. R/W Clearance and Utility Clearance letters should also be submitted as part of the final plans package to ensure that the approval process will not delay bid advertisement.

## **238 INTERGOVERNMENTAL AGREEMENT (IGA)**

ADOT will prepare an Intergovernmental Agreement which outlines the financing for the project based on the cost estimate. The estimated project cost shown in the IGA includes a 15% estimate for the construction engineering cost and a 5% minimum contingency for change orders. ADOT will transmit the agreement to the project sponsor along with instructions for processing. The process requires City Council or Board of Supervisors action, agreement review and approval by sponsor's attorney, and the deposit of matching funds prior to the advertisement for bids. The execution of the intergovernmental agreement is a guarantee by the local government to provide local government matching funds for the project and to pay all project costs over the amount of federal-aid funds provided by the MPO or COG. The estimated project cost, federal-aid share, and local matching funds shown in the intergovernmental agreement are only estimates. The amount of federal-aid and local matching funds required to be provided for the financing of the project are listed on the project recapitulation sheet provided in the PS&E package plus a surcharge. The PS&E package will be sent by Contracts & Specification Section to the local jurisdiction for approval and authorization for ADOT to advertise the project for bid.

## **239 PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E) PACKAGE**

Following revisions to project plans as requested by ADOT Contract & Specifications Section, the project sponsor will be sent final plans, specifications, and estimate for approval. A written response from the local agency to Contracts & Specifications Section is required authorizing ADOT to advertise on the sponsor's behalf. Approval of PS&E package and authorization to advertise is an agreement to provide local matching funds shown in the project estimate recapitulation sheet. MPO/COG concurrence to provide federal-aid funds for construction and change order costs for the project will be required prior to the project being advertised for bid. Earthwork computations, mass curve, and plotted cross-sections are required, if applicable.

## **240 LOCAL AGENCY MATCHING FUNDS**

The matching funds required for a local government project will be the amount shown on the project estimate recapitulation sheet provided by Contracts & Specifications Section in the project PS&E bid package plus a surcharge amount.

## **241 CHANGE ORDERS**

ADOT will continue to require that a contingency for additional construction funds be provided. The contingency will be based on a 5% minimum surcharge of the project estimate. The percentage used is based on the estimated total construction cost of the project and will be used to cover the estimated cost of change-orders or force account work that may be required during construction. The project sponsor

will be required to provide 100% of the estimated percentage of change order costs when a MPO or COG does not provide federal-aid funds for change orders. Matching funds must be submitted prior to the project being advertised for bid. It is recommended that the MPO's and COG's program a 5% change order percentage amount for all local government projects for federal-aid cash flow purposes.

## **242 PROJECT BID ADVERTISEMENT AND AWARD**

Projects will be advertised for bid when Environmental Clearance, R/W and Utility Clearance are approved, PS&E package is approved, the IGA has been executed and matching funds have been provided. Projects are advertised, bids opened, bids reviewed and certified, and awarded by the State Transportation Board. This process requires a minimum of 2 1/2 months.

If the low bid is at or below the ADOT estimate, a recommendation will be made to the Transportation Board for award. A written response from the local agency of concurrence is required.

Should the low bid be in excess of the ADOT estimate, ADOT will contact the project sponsor and the MPO/COG to inform both parties of the bid results and the difference in project cost between the low bid and the ADOT estimate. The local agency and MPO/COG must determine a source of additional funds prior to the project being recommended for award. Additional matching funds provided by the local government must be submitted to ADOT within 30 days. A written response by the local government for concurrence of award will be requested by Contracts and Specifications Section. Should additional federal funds and/or local agency matching funds not be provided, the project will be returned to the project sponsor to be revised in accordance with Federal-aid Program procedures and the MPO/COG approved federal-aid and local government funding limits, and a schedule for a new bid advertisement will be made by Contracts & Specifications Section. It is recommended that the MPO/COG program a bid overrun percentage amount (from 5% to 10%) for all local government projects for federal-aid cash flow purposes, to minimize any delay in the award of a local government project when bids exceed Contracts & Specifications Section's estimate.

## **243 PROJECT CONSTRUCTION AND POST DESIGN SERVICES**

The local agency/project sponsor is responsible for post-design work that may be required during the construction phase of the project. Should there be questions by the contractor or ADOT regarding design errors, omission of design information on the plans, or suggestions for design changes, the engineering designer (or consultant firm) must be available to respond to these inquiries. ADOT engineers do not affix their professional engineering seal to the plans or specifications for any local government project, and cannot make any design changes for the project. The engineering designer (or consultant firm) must answer all design inquiries and prepare any design changes to their engineering drawings and specifications. This information must be provided to the engineering designer (or consultant firm) when they are retained to start project development.

## **244 FINAL PROJECT COST ACCOUNTING**

At the conclusion of the construction phase of the project, a final accounting of project costs will be made. The project sponsor will be informed by letter from Accounts Receivable Section, of the final construction costs for the project. Should any additional funds be required, a request for those funds within 30 days will be included in the letter. All funds provided by the project sponsor in excess of the amount needed to reimburse ADOT for design review costs and to pay all construction costs will be returned within 30 days, or can be applied to another project, or held on account for a future project.

Future construction projects will not be advertised for bid until reimbursement is made to ADOT for past project construction costs.

## **250 PROJECT DEVELOPMENT CHECKLIST**

The following steps summarize the procedure to be used for processing federally funded local government STP, CMAQ, BR, RR, and HES projects. ADOT's role is to assist the local agencies through the project development process and insure compliance with ADOT/FHWA policies, regulations, and guidelines. ADOT will also administer the construction phase of most local government projects. The typical project will take 18-24 months from inception to advertisement.

1. Project sponsor contacts their local Council of Government/Metropolitan Planning Organization (COG/MPO) to include the project in the appropriate five year transportation improvement program (TIP).
  - Project must be in the TIP/STIP to qualify for Federal funding and the local government process.
  - Federal-aid projects are to meet functional classifications.
2. Project sponsor submits a letter to the ADOT Local Government Engineer requesting project number and providing brief detail of project scope, location, cost, schedule, and COG/MPO TIP identification number.
3. If Safety or Bridge Rehabilitation/Replacement funded, appropriate project eligibility report must be prepared and submitted to ADOT for approval of funding.
4. A Local Government Section project manager is assigned the project, requests project and TRACS numbers from ADOT, and notifies local agency.
5. Local agency deposits ADOT review fee (typically \$10,000.00) to ADOT.
6. Local agency arranges a kick-off meeting with sponsor, design consultants, ADOT and COG/MPO.
7. If Federal funds are being used for design, follow ADOT/FHWA consultant procurement guidelines.
8. Budget 15% construction engineering and 5% contingency funds if ADOT is performing construction administration of the project.
9. Local agency submits Initial Design Concept Report (DCR) to ADOT Local Government Section (LGS). The DCR should include a realistic scope, bid date, and cost estimate.
10. ADOT reviews DCR and sends comments to Sponsor.
11. Sponsor submits final DCR to ADOT Local Government Section.
12. Local Government Section approves DCR and notifies Sponsor.
13. Sponsor submits Initial Environmental Report to ADOT Local Government Section.
  - Pigmy owl situation clearance takes at least 12 to 18 months.
  - 404 and 401 permits from US Army Corps take at least 12 months. Have a definite window for construction activities.



14. ADOT Local Government Section Environmental Planner reviews environmental determination report and provides comments to Sponsor.
15. Local agency submits Final Environmental Determination Report to ADOT Local Government Section.
- 16. Environmental clearance is obtained from ADOT or FHWA through the Local Government Section Environmental Planner. NEPA and FHWA guidelines must be satisfied.**
17. Sponsor submits Preliminary Plans (30% stage), preliminary cost estimate, and reports to ADOT Local Government Section. Required reports depend on the project type and may include drainage report, geotechnical report, pavement design summary, materials memo, structure selection report, etc. **Do not proceed beyond 30% design without an environmental clearance if Federal funds are used for design.**
18. ADOT 30% review comments are transmitted to the sponsor who should resolve at an early stage.
  - Any design exceptions? If so, get approval, but try to avoid design exceptions.
19. Sponsor submits 60% plans, specifications, and estimate to ADOT Local Government Section.
20. Sponsor submits initial/final materials memo, geotechnical report, pavement design summary, drainage report, and bridge selection report.
21. If necessary, arrange a field review meeting with ADOT district staff, local agency, and design team to resolve ADOT review comments.
22. Sponsor Initiates the Utility clearance letters.
23. Sponsor initiates the Right of Way clearance letters.
24. ADOT Local Government Section project manager initiates an IGA (Intergovernmental Agreement) between ADOT & local sponsor. Allow 6 months to obtain signatures from all parties and process the paperwork.
25. Sponsor submits 95% PS&E package to ADOT. ADOT conducts final review.
  - All ADOT review comments to be resolved before submitting 95% PS&E and all final reports to be approved by ADOT
  - Include in the PS&E package landscaping plans, seed specs, and NPDES requirements if necessary.
26. Sponsor submits Final Plans (100% complete), final cost estimate, and bidding schedule to ADOT.
27. Verify Earthwork calculations (quantity check) to avoid change orders in the field.
28. Need local funds from sponsor based on final cost estimate. Include 5% surcharge (contingency) if construction administered by ADOT for change orders.
29. If federal funds are not adequate to meet the final cost estimate based on project scope, revise the scope to fit the budget or sponsor to pay the balance to ADOT.
30. Final PS&E approval from sponsor.

31. ADOT obtains obligation authority of Federal funds from FHWA subsequent to final PS&E and clearances.
32. Allow ADOT Contracts & Specifications Section at least 2 months to advertise the project. DBE requirements, Davis Bacon wages, training, etc. must be satisfied.
33. Sponsor to submit all original drawings when requested from ADOT.
34. Bid Opening (allow 22 working days from the date job advertised).
35. ADOT Board to award a contract to low bidder(next available Board date after bid opening).
36. See prospective contractor within 2-4 weeks.
37. ADOT arranges a partnering workshop if ADOT is administering construction.
38. Construction begins.

#### NOTES

- A major task is the preparation of a realistic schedule and meeting allocated budget with a defined scope (DCR).
- Check quantities twice.
- Prepare plans, specifications and estimate with utmost care. Missing details and notes are potential change orders for the contractor.
- Prepare plans that are legible without too much information on a sheet.
- Prorate total project costs at appropriate FHWA and sponsor rates.
- Add 5% surcharge for change order possibility.
- Add 15% for ADOT CE costs (Construction Engineering).
- Any project cost in excess of amount allocated by the COG must be sponsor responsibility.
- Have all clearance and permits on hand during construction.
- Constant coordination and communication is the key to meeting deadlines.

## APPENDIX D

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**SECTION 500 CERTIFICATION ACCEPTANCE PROGRAM**


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*ADOT, with FHWA review and approval, may delegate to local governments the authority to self-administer projects under the certification acceptance program. If approved, a local government is granted authority to design, advertise and award, and administer construction of local projects. ADOT will review and approve the project design concept report, review the environmental determination, provide environmental clearance, and process Federal funds authorization.*

**510 CERTIFICATION ACCEPTANCE APPLICATION PROCEDURE**

**The following is a brief summary of steps performed in approving a local agency for the certification/acceptance program. These steps are by no means all inclusive of the process.**

1. Local agency submits a formal request to the ADOT Local Government Section to initiate process of evaluating the local agency's qualifications for approval to self-certify and accept their construction projects. The Local Government Section coordinates review and approval of the local agency's program.
2. The local agency is provided information regarding certification acceptance requirements.
3. The local agency and appropriate ADOT District office coordinate ADOT's oversight and evaluation of the local agency's administration of one or more construction projects.
4. The local agency submits their documented certification acceptance process to ADOT for review. The local agency's process must demonstrate a thorough understanding of ADOT and FHWA processes, policies, and specifications.
5. Designated areas of ADOT, such as, Engineering Consultant Services, Contracts and Specifications, Roadway Design, Civil Rights Office, Construction Operations, and the District, as well as the FHWA, review the documentation and meet with the local agency to evaluate their processes. Typical items reviewed are the local agency's organization, standards and procedures, regulations, applicable laws, and past performance.
6. Following resolution of comments and approval of final documentation, the ADOT Director and local agency authority sign an approved procedures document.
7. A workshop is held with ADOT, the local agency, and FHWA to facilitate implementation of the local agency's procedures and adherence to requirements.

*ADOT is obligated to conduct this process in accordance with the "ADOT-FHWA Operating Partnership," which details responsibilities and requirements. A periodic review of the local agency's operation and administration of projects should be conducted at least once every four years according to the partnership agreement.*

### 511 Items Reviewed for Qualification

#### ITEM

#### REVIEW REQUIREMENTS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• DESIGN &amp; DEVELOPMENT               <ul style="list-style-type: none"> <li>a) Project Scoping and</li> <li>b) Design Exceptions/Variances<br/> <i>ADOT Contact:</i><br/> <i>Tim Wilson, Roadway Predesign</i><br/> <i>(602) 712-6962</i></li> <li>c) Standards<br/> <i>ADOT Contact:</i><br/> <i>Chris Cooper, Roadway Design</i><br/> <i>(602) 712-7082</i></li> <li>d) Specifications<br/> <i>ADOT Contact:</i><br/> <i>Barry Crockett, Contracts &amp; Specifications</i><br/> <i>602-712-7221</i></li> </ul> </li> </ul> | <p>Procedures used for project development</p> <p>Procedures for approval of design exceptions as part of Project Scoping.</p><br><p>Design &amp; Construction standards.</p><br><p>Project administration and materials specifications (PS&amp;E).</p> |
| <ul style="list-style-type: none"> <li>• ENVIRONMENTAL APPROVAL<br/> <i>ADOT Contact:</i><br/> <i>Thor Anderson, Environmental Planning Group</i><br/> <i>602-712-8637</i></li> </ul>  | <p>Use ADOT/FHWA process.</p>   |
| <ul style="list-style-type: none"> <li>• RIGHT-OF-WAY ACQUISITION               <ul style="list-style-type: none"> <li>a) R/W clearance and certification<br/> <i>ADOT Contact:</i><br/> <i>Louis Malloque, R/W Project Management</i><br/> <i>602-712-8755</i></li> </ul> </li> </ul>   | <p>Response to FHWA 59 point questionnaire.</p>   |

- UTILITIES & RAILROADS

- |    |   |   |
|----|---|---|
| a) | Utility clearance certification<br><i>ADOT Contact:</i><br><i>Seyedkamal Mirtalaei,</i><br><i>602-712-7643</i>        | Procedures for prior rights determination.<br>Procedures for federal-aid<br>Reimbursement of utility relocation costs.        |
| b) | Railroad/Highway Grade crossing<br><i>ADOT Contact:</i><br><i>Robert Travis Utility/RR Section</i><br><i>602-6193</i> | Procedures for project agreements with<br>the RR for railroad projects improved as<br>part of a highway construction project. |

- PROCUREMENT

- |    |  |  |
|----|--|--|
| a) | Procurement of Consultants<br><i>ADOT Contact:</i><br><i>Susan Tellez, Engineering Consultants Services</i><br><i>(602) 712-7720</i> | Procurement procedures.  |
| b) | Procurement of contractors<br><i>ADOT Contact:</i><br><i>Barry Crockett, Contracts &amp; Specs</i><br><i>602-712-7221</i>            | Procurement code and procedures for<br>construction projects.<br>Complete bid package. |
| c) | Equipment Procurement<br><i>ADOT Contact:</i><br><i>Terri Johnson, Procurement</i><br><i>(602)-712-8364</i>                          | Equipment procurement code and<br>procedures   |

- CIVIL RIGHTS

- |    |   |  |
|----|---|--|
| a) | DBE requirements for  | Procedures for establishing percentages.<br>procurement of Consultants                         |
| b) | DBE requirements for  | Procedures for establishing percentages<br>construction projects<br>10% Goal for all projects. |
|    | <i>ADOT Contact:</i><br><i>Eddie Edison, Civil Rights Office</i><br><i>602-712-7761</i> |  |

- CONSTRUCTION ADMINISTRATION

- |    |  |                             |
|----|--|-----------------------------|
| a) | Construction Inspection  | Procedures for items a – f. |
| b) | Materials Testing  |                             |
| c) | Quality Assurance, Independent<br>testing, frequencies   |                             |
| d) | Project Final Acceptance   |                             |
| e) | Labor Compliance   |                             |
| f) | Resolution of Claims   |                             |
|    | <i>ADOT Contacts:</i><br><i>Julio Alvarado, Construction Group</i><br><i>602-712-7323</i><br><i>Appropriate ADOT District Office</i> |                             |

- **INTERNAL AUDIT PROCEDURES**  
*ADOT Contact:*  
 Robert Gallas, *Audit & Analysis*  
 602-712-7237  
 Approval of the single audit process by ADOT.
  
- **ADMINISTRATIVE PROCEDURES**
  - a) FHWA Authorization of  
 ADOT will provide the procedures, and the format for all administrative Federal-aid Funds procedures.
  - b) Reimbursement of contractor payments and other eligible federal-aid costs.
  - c) Records Retention
  - d) ADOT Process Review*ADOT Contact:*  
 John Dickson, *Local Government Section*  
 602-712-8683

Sharon Gordon, FHWA, (602) 382-8972, is involved in all of the activities of the Certification Acceptance process.

## **520 CERTIFICATION ACCEPTANCE PROCESS AND ADMINISTRATIVE PROCEDURES**

## **521 REQUEST FOR FEDERAL AND TRACS PROJECT NUMBERS**

*ADOT provides federal-aid and TRACS project numbers for all federal-aid design, R/W, utility, and construction projects. Requests for project numbers are submitted by the local agency to the ADOT Local Government Section, and should be requested prior to the start of the project development process. Include with the request, the project location, termini, project length, project cost including construction engineering, the expected bid advertisement date, a copy of the approved MPO or COG federal-aid program project budget, and the MPO or COG policy regarding federal-aid participation in change orders. A separate line item for federal-aid design, utility, and R/W projects should be shown in the MPO or COG Transportation Improvement Program (TIP). Approximately two weeks are required for project numbers to be assigned and transmitted to the local agency. Project folders will contain comprehensive documentation of the project development and construction administration process including all approvals given.*

### **521.1 SAFETY PROJECTS**

To qualify for Federal-aid safety funds, a project eligibility request must be submitted to ADOT Local Government Section. Local Government Section and FHWA staff review the request and make a determination if the project is eligible for federal safety funds. The notice of project funding eligibility will be sent to the project sponsor by Local Government Section. It is recommended that project eligibility be determined prior to the inclusion of the project in the 5 year local government highway construction program. Once a project is approved and a request for a federal-aid and TRACS project numbers has been obtained, a firm bid advertisement date should be provided. ADOT manages safety projects on a first-come basis and must manage the project financing and obligation of funds for projects with other safety projects scheduled statewide in accordance with the program funding limits established by ADOT. Any conflict with the expected bid advertisement date for a project and other projects in the Local Government 24 Month Schedule will be discussed with the project sponsor. See section 300 of this manual for additional information regarding safety funds.

## **521.2 BRIDGE REPLACEMENT/REHABILITATION PROJECTS**

To qualify for Federal-aid bridge replacement and rehabilitation funds, a project eligibility request must be submitted to ADOT Local Government Section. Local Government Section and FHWA staff review the request and make a determination if the project is eligible for federal bridge replacement or rehabilitation funds. A notice of project funding eligibility will be sent to the project sponsor by Local Government Section. It is recommended that project eligibility be determined prior to the inclusion of the project in the 5 year local government highway construction program. Once a project is approved and a request for a federal-aid and TRACS project numbers have been obtained, a firm bid advertisement date shall be provided. ADOT manages bridge funds on a first-come basis and must manage the project financing and obligation of funds for bridge projects scheduled statewide in accordance with the program funding limits established by ADOT. Any conflict with the expected bid advertisement date a project and other projects in the Local Government 24 Month Schedule will be discussed with the project sponsor. See section 400 of this manual for additional information.

## **522 ENVIRONMENTAL DETERMINATION AND CLEARANCE PROECESS**

All federal-aid projects require an environmental analysis and an Environmental Clearance certification. The project sponsor is responsible for obtaining all needed information and data, and preparing reports in accordance with ADOT format. The format and additional information is available in Appendix C of this manual and on the ADOT website. The final Environmental Clearance will be issued by ADOT or FHWA. A letter identifying the type of environmental determination and information required for analysis will be sent by the Local Government Section NEPA Planner to the project sponsor. The analysis of information provided by the project sponsor for projects that meet Categorical Exclusion requirements will be prepared by ADOT. All other environmental analysis work is the responsibility of the project sponsor. If Federal funds are used for design, final design (design beyond 30% plans) and right-of-way negotiation cannot be initiated until environmental clearance has been obtained.

## **523 DESIGN PROJECTS**

All requests for authorization of federal-aid funds for project design costs are submitted to ADOT Local Government Section. Design projects may require two authorization requests; one for preliminary engineering design and one for final design. Included with the request is the cost for the preliminary (up to 30% design stage) and final design work, the federal-aid pro-rata share, and the local matching share of the project cost. ADOT will request authorization of federal-aid funds on the local agency's behalf and will transmit a copy of FHWA authorization to the local agency. Costs incurred prior to FHWA authorization are not eligible for federal-aid reimbursement. Design can not proceed beyond the 30% stage without environmental clearance if Federal funds are used for design.

## **524 UTILITY RELOCATIONS COSTS**

All requests for authorization of federal-aid funds for utility preliminary engineering and relocation costs is submitted to ADOT Utilities and Railroad Section. Included with the request is the cost for the utility preliminary engineering and relocation work, the federal-aid pro-rata share, and the local matching share of the project cost. ADOT will request authorization of federal-aid funds on the local agency's behalf and will transmit a copy of FHWA authorization to the local agency. Costs incurred prior to FHWA authorization are not eligible for federal-aid reimbursement.

## **525 RIGHT-OF-WAY ACQUISITIONS COSTS**

All requests for authorization of federal-aid funds for R/W acquisition costs are submitted to the ADOT R/W Public Liaison Section. Included with the request is the cost for the right-of-way

acquisition work, the federal-aid pro-rata share, and the local matching share of the project cost. ADOT will request authorization of federal-aid funds on the local agency's behalf and will transmit a copy of FHWA authorization to the local agency. Costs incurred prior to FHWA authorization are not eligible for federal-aid reimbursement.

## **526 PROJECT AGREEMENTS AND REQUESTS FOR REINBURSEMENT OF DESIGN, R/W, AND UTILITY COSTS**

ADOT will execute a project agreement with FHWA for design, R/W, and utility relocation project costs on the local jurisdiction's behalf. A copy of the project agreement will be transmitted to the local jurisdiction. All requests for reimbursement of design, R/W, and utility relocation payments and other eligible federal-aid costs are submitted to ADOT Accounts Receivable Section, Administrative Services Division. Requests should be prepared using ADOT's payment forms. Requests for reimbursement can be made once monthly. All reimbursement requests must be received between the 10th and the 25th of the month. For large projects where project related costs and individual monthly reimbursement requests will exceed \$1,000,000, a cash flow projection schedule should be provided to Accounts Receivable Section prior to the start of the project. This schedule is necessary for the monitoring of ADOT's cash flow and the facilitation of the federal-aid reimbursement process with FHWA.

## **527 CHANGE ORDERS FOR DESIGN, R/W AND UTILITY COSTS AND MODIFIED PROJECT AGREEMENT REQUESTS**

If the MPO or COG policy provides for federal-aid participation in the cost of change orders and when project costs exceed the amount of federal-aid described in the project agreement, a request for a modified project agreement can be made. ADOT will modify the project agreement in accordance with MPO or COG policy regarding federal-aid participation of change orders costs.

## **530 CONSTRUCTION PROJECTS**

All requests for authorization of federal-aid funds for construction are submitted by the local agency to ADOT Local Government Section. Environmental clearance, utility clearance and R/W clearance certification dates must be provided in the request as well as a statement that design exceptions (have/have not) been (requested/approved) for the project. Also include a cost breakdown showing the estimate for the project detailing the estimate for construction engineering cost, the federal-aid pro-rata share, and the local matching funds share of the project cost. An ADOT PS&E Review Sheet Package of completed forms should be included with the authorization request. ADOT will request authorization of federal-aid funds on the local agency's behalf and will transmit a copy of FHWA authorization to the local agency. FHWA authorization is required prior to construction project advertisement for bid. Costs incurred prior to FHWA authorization are not eligible for federal-aid reimbursement. After the project bids have been opened, certified and the project awarded, a copy of the executed contract with the contractor and an agreement estimate prepared in accordance with ADOT's format shall be submitted to ADOT. ADOT will execute a project agreement with FHWA on the local jurisdiction's behalf. A copy of the project agreement will be transmitted to the local jurisdiction. ADOT Construction Operations Section may be contacted regarding change orders and questions on the eligibility of change orders for federal-aid reimbursement of costs.

## **531 REINBURSEMENT OF CONTRACTOR PAYMENTS**

All requests for reimbursement of contractor payments and other eligible federal-aid project costs are submitted to ADOT Accounts Receivable Section, Administrative Services Division. All requests should be prepared using ADOT payment forms and may be made once monthly. All reimbursement requests must be received between the 10th and the 25th of the month. For large projects where



monthly contractor payments, or other project related costs, and individual monthly reimbursement requests will exceed \$1,000,000, a cash flow projection schedule should be provided to Accounts Receivable Section prior to the start of the project. This schedule is necessary for the monitoring of ADOT's cash flow and the facilitation of the federal-aid reimbursement process with FHWA.

### **532 MODIFIED PROJECT AGREEMENT REQUESTS**

If the MPO or COG policy provides for federal-aid participation in the cost of change orders and when project costs exceed the amount of federal-aid described in the project agreement, a request for a modified project agreement shall be made to ADOT Project Funding Section. ADOT will modify the project agreement in accordance with MPO or COG policy regarding federal-aid participation of change orders costs.

### **533 PROJECT ACCEPTANCE**

ADOT Construction Operations Section should be contacted to request participation in the final acceptance of all federal-aid projects. FHWA may choose to participate in the final acceptance review process. The final letter of acceptance and project information for the final voucher of project costs shall be submitted to ADOT Local Government Section.

### **534 FINAL VOUCHER PROCESS, RECORDS RETENTION, AND PROJECT AUDIT**

All federal-aid projects require that a Final Voucher be prepared of project costs prior to closing out the project. The local agency will submit to ADOT Local Government Section within four (4) months after project completion and acceptance, a Final Voucher package which includes the final contractor payment, a statement by the Engineer certifying that all the work has been completed and is acceptable, and an invoice detailing total funds spent and the Federal-aid portion of total funds spent. All project documentation must be retained for five (5) years after the project final voucher has been completed. Once the final voucher is processed for the project, the project is closed and no federal-aid reimbursement of project costs can be made.

### **535 AS-BUILT PLANS**

As-built plans of the completed project should be prepared within four (4) months of the final acceptance of the project. Costs for as-building the project are eligible for federal-aid participation, should be included as part of the construction engineering cost for the project and should be included in the final voucher cost package that is submitted to ADOT.

### **540 CERTIFICATION ACCEPTANCE PROCESS REVIEW**

ADOT is required to conduct a review of local agency approved federal-aid project procedures and documentation at least once every four years. More frequent reviews may be conducted during the early stages of local agency Certification Acceptance to ensure that federal-aid procedures are being followed and documented. Members of ADOT's Local Government Certification Acceptance Committee will conduct the process review. ADOT will provide at least one month notice prior to the conduct of the project review. FHWA may choose to participate in the process review.

### **550 LOCAL GOVERNMENT LIAISON**

Each local agency with certification acceptance eligibility shall designate a local government liaison who will be responsible for the agency's procedures and policies as they relate to certification acceptance. Specific responsibilities of the liaison include:

- Coordinate with internal Group and Section Project Managers and Financial Managers for all federal-aid projects that will be submitted to ADOT for processing.
- Coordinate with MPO or COG to ensure that the project has been programmed in the Transportation Improvement Program (TIP) and included in the State Transportation Improvement Program (STIP) submitted to FHWA for approval.
- Submit requests to ADOT Local Government Section for federal and ADOT TRACS numbers for projects. Information submitted to include the Federal fiscal year the project is programmed and the type and amount of Federal funds programmed for the project. State whether Federal funds are to be used for design, Right-of-Way acquisition, utility relocation, and construction. Provide an estimated budget amount for each phase. State when the project is expected to be advertised for bid.
- Submit the initial design concept report and environmental determination report to the ADOT Local Government Section. ADOT Environmental Planning Group will communicate directly with the sponsor project manager on what type of environmental analysis is required to obtain environmental clearance.
- Coordinate with the ADOT Environmental Planning Group on the resolution of comments to obtain environmental clearance for the project. Ensure that project is advertised for bid within 3 years of the environmental clearance approval date. Projects scheduled to advertise 3 years after the environmental clearance date will need to have their initial environmental document reviewed and approved by the ADOT Environmental Planning Group again for a new or revised environmental clearance date prior to bid advertisement.
- Coordinate with the project manager in the ADOT Local Government Section on the documents to be submitted prior to the project advertising for bid. A copy of the detailed estimate is submitted to ADOT's Civil Rights Department to obtain the DBE percentage goal for the project. Documents submitted to ADOT project manager are:
  - a. **Cover letter documenting the dates for environmental clearance, R/W clearance, and utility clearance. A statement that design exceptions were or were not approved for the project. Estimated project cost including construction engineering costs. Estimate the amount of federal funds at the federal pro-rata share of federal participation and the local share of matching funds.**
  - b. A Federal Highway Administration (FHWA) PS&E Review sheet.
  - c. A financial Recap sheet in FHWA format.
  - d. A project location map (letter size).

The ADOT project manager will request the authorization of federal funds on behalf of the project sponsor. A letter will be sent to the project sponsor documenting the authorization date and the notice to proceed to incur project costs.

- After the project bids are opened, a copy of the low bid should be submitted to ADOT's Civil Rights Department to ensure that the contractor meets the federal DBE requirements for the project. The project is then awarded.
- Submit to the ADOT project manager a project agreement estimate in FHWA format and a copy of the contract with the contractor.

- Communicate with the project manager on project progress during construction. Submit a project closeout document stating that the project has been completed and accepted by the City/County.
- Submit progress payment requests on the ADOT invoice form on a monthly basis or at the end of the project to the ADOT Accounts Receivable Section. Ensure that the construction engineering costs are included in addition to the contractor payments.

Coordination with ADOT and following the described steps will ensure that all federal-aid projects will be completed efficiently and in accordance with all FHWA procedures. Contact the Local Government Engineer at (602) 712-8683 to obtain copies of any FHWA or ADOT forms required for submittal.

**560 LOCAL GOVERNMENT CERTIFICATION ACCEPTANCE LIAISONS**

Mr. Ronnie Stricklin  
 Grants/Federal Aid Coordinator  
 Maricopa County Department of Transportation  
 2901 W. Durango St.  
 Phoenix, AZ 85009-6357  
 Phone - (602) 506-8054  
 FAX - (602) 506-4882  
 E-Mail – [ronniestricklin@mail.maricopa.gov](mailto:ronniestricklin@mail.maricopa.gov)

Ray Dovalina, P.E.  
 Deputy Director, City of Phoenix  
 Street Transportation Department  
 200 W. Washington Street, 6<sup>th</sup> floor  
 Phoenix, AZ 85003-1611  
 Phone – (602) 262-4872  
 FAX – (602) 495-0336  
 E-Mail – [don.herp@phoenix.gov](mailto:don.herp@phoenix.gov)

Mr. Rick Ellis, P.E.  
 Civil Engineering Manager  
 Pima County Department of Transportation  
 and Flood Control District  
 201 N. Stone Avenue, 3<sup>rd</sup> Floor  
 Tucson, AZ 85701-1207  
 Phone - (520) 740-6449  
 FAX - (520) 620-1933  
 E-Mail – [rick.ellis@dot.pima.gov](mailto:rick.ellis@dot.pima.gov)

Mo El- Ali, P.E.  
 Deputy City Engineer  
 City of Tucson  
 P.O. Box 27210  
 Tucson, AZ 85726-7210  
 Phone - (520) 791-4146  
 FAX - (520) 791-4239  
 E-Mail – [mo.el-ali@tucsonaz.gov](mailto:mo.el-ali@tucsonaz.gov)

Andy Goh, P.E.  
 City Engineer  
 City of Tempe  
 P.O. Box 5002  
 31 East 5<sup>th</sup> Street  
 Tempe, AZ 85280  
 Phone – (480) 350-8896  
 FAX – (480) 350-8591  
 E-Mail – [andy\\_goh@tempe.gov](mailto:andy_goh@tempe.gov)

William Fay, P.E., Esq  
 Public Works Engineer/CIP  
 City of Chandler  
 Mail Stop 405  
 Po Box 4008  
 Chandler, AZ 85244-4008  
 Phone – (480) 782-3343  
 FAX – (480) 782-3415  
 E-Mail – [William.Fay@chandleraz.gov](mailto:William.Fay@chandleraz.gov)

Marc Ahlstrom, P.E.  
Senior Civil Engineer  
City of Mesa Engineering Department  
P.O. Box 1466  
Mesa, AZ 85255  
Direct - (480) 644-4622  
Fax - (480) 644-3392  
e-mail: [marc.ahlstrom@cityofmesa.org](mailto:marc.ahlstrom@cityofmesa.org)

**THE FOLLOWING COMMUNITIES ARE IN THE PROCESS OF COMPLETING THE CA PROCEDURES \_  
BUT ARE STILL NOT CERTIFIED**

Evelyn Ng  
City of Scottsdale  
7447 E. Indian School Road  
Scottsdale, AZ 85251  
480-312-7637  
[eng@scottsdaleaz.gov](mailto:eng@scottsdaleaz.gov)

*lgm-sec500.doc*

**APPENDIX E**

**COST DERIVATION**

**APPENDIX F**

**PAYMENT REPORT FORMAT**

**APPENDIX G**

**EVALUATION SCHEDULE**



## **SECTION VIII**

### **ADVANCE AGREEMENT CHECKLIST**

# ARIZONA DEPARTMENT OF TRANSPORTATION

## ENGINEERING CONSULTANTS SECTION

### ADVANCE AGREEMENT CHECK LIST (See FAR 31.109)

#### 1. Direct Labor

Direct labor will be billed at actual costs, as defined in FAR 31.001, unless a specific classification or individual's billing rate is capped. However, for partners, sole proprietors and Limited Liability Companies (LLCs) where owners may not be paid an hourly wage or salary, direct labor will be billed at rates agreed to by ADOT. (Also see **Compensation for Personal Services.**)

Only the pay rates of those employees who will likely be expected to be directly involved on the Project stated in the Contract can be used in developing cost proposal rates.

#### 2. Home Office Allocations or Similar Allocated Costs

FAR 31.109(h)(14) states, "General and administrative costs (e.g., corporate, division, or branch allocations) attributable to the general management, supervision, and conduct of the contractor's business as a whole." These costs may represent a significant portion of indirect (Overhead) costs.

All Cost Principles addressed in the Contract Cost Allowability Guidelines and Policies ("CCAGP") must be followed by a Consultant/Subconsultant's home office, division or other related entity that allocates costs to the Consultant/Subconsultant (see the CCAGP A.5. Allocability of Costs). These costs should be identified and agreed to in advance as to the amounts considered reasonable and allocable to ADOT contracts.

#### 3. Overhead Rates by Type of Engineering Discipline or Specialty

Firms qualified to provide more than one engineering discipline or specialty must be able to substantiate separate overhead rates for each of the following disciplines:

- Construction Administration (CEI)
- Design
- Geotech
- Supplemental Services

#### **4. Compensation for Personal Services**

See CCAGP B.31.205-6 Compensation for Personal Services.

Compensation for personal services is normally the most significant element of indirect cost. The components of compensation for personal services should be identified and the amounts to be considered reasonable and allocable to ADOT contracts agreed to in advance.

In particular, the following elements of Compensation for Personal Services, if applicable, should be agreed to in advance:

- Both the reasonableness and allocability of compensation paid to partners, sole proprietors, or owners and family members of same, along with highly compensated employees.
- Allowability of bonuses. Under above reference, see 2. *Bonuses and incentive compensation.*

#### **5. Cost of Money**

If this item is requested, it must be properly proposed as a separate line item in the Derivation of Costs Proposal, and documented in accordance with 31.205-10. Also see FAR 31.201-1.

#### **6. Bid and Proposal Costs (see FAR 31.205-18) and Selling/Marketing Costs (see FAR 31.205-38)**

Bid and proposal costs and selling/marketing costs will be looked at carefully in the preaward review. Any unreasonable and/or unallocable costs being claimed will be disallowed. Adequate documentation will be expected for such claimed costs. Unallowable portions will be expected to be properly identified.

#### **7. Other Direct Costs**

It will be expected that Other Direct Costs (any expense/cost other than Direct Labor and Subconsultants) be included in the Overhead cost pool. If a Consultant/Subconsultant proposes Other Direct Costs, it will need to obtain prior approval of its accounting methods by ADOT's Office of Audit & Analysis—External Audit Team before it can include such costs in its Derivation of Costs Proposal submitted to ADOT's Engineering Consultants Section.

## **7. Other Direct Costs, continued**

The list of incidental costs that follow should not be considered to be "all-inclusive". However, the items noted below are specific costs ADOT has identified as being onerous to deal with as Other Direct Costs. Most Consultants/Subconsultants already include such costs in Overhead cost pools.

- Audio/Video equipment and supplies, including VCRs and video cameras
- Cell phones
- Copy machines
- Densometer
- FAX
- Internet/electronic mail
- Mileage for company vehicles
- Office space considered to be "extra". (Exception is for Construction Administration field office.)
- Postage and/or Courier
- Survey supplies
- Telephone calls--both local and long distant

Additional points to consider:

- If a Consultant/Subconsultant does not have separate cost pools (for example CADD and Reproduction Costs), ADOT believes it will be very difficult to adequately substantiate such costs.
- Be aware that if the costs of specific services normally provided by a Consultant/Subconsultant are included in its Overhead Cost Pool, then any unexpected costs that may be incurred to provide those same services must be charged to an Overhead cost account. Any questions regarding this matter should be directed by ADOT's Office of Audit & Analysis—External Audit Team.

## **8. Incidental Costs Which Should Normally Be Charged Directly to the Contract**

- Lease/rental of vehicles or other specialty equipment. (This cost should be substantiated by evidence of appropriate bidding including support for the bid accepted.)
- Mobilization of equipment.
- Travel and Lodging, including per diem, following ADOT's Travel Authorization Policy.
- Special reproduction costs provided by outside vendors

## **SECTION IX**

### **ADOT CONSULTANT AUDIT CRITERIA (Information Bulletin No. 08-03 and 01-06)**



Janet Napolitano  
Governor

Victor M. Mendez  
Director

## Arizona Department of Transportation Intermodal Transportation Division

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

October 15, 2008

Floyd Roehrich, Jr.  
State Engineer

### INFORMATION BULLETIN NO. 08-03

TO: Consultant Engineering Firms, ADOT Project Managers  
& ADOT Office of Audit & Analysis

FROM: Engineering Consultants Section

SUBJECT: Pre-Award Audit Requirement Timeframe

ADOT is striving to be more efficient in working with Consultants to negotiate overhead rates prior to the execution of contracts and to minimize the problems associated with adjusting overhead rates and "trueing-up" the costs mid-way through the contracts.

Therefore, effective immediately, the procedure below must be followed in order to help ensure that overhead rates can be negotiated prior to contract execution, where applicable.

Within two weeks after receiving a notice of selection, the selected Consultant and its Subconsultants are required to comply with the Advance Agreement Checklist (SOQ Package, SECTION IX) and submit financial documentation to ADOT Office of Audit & Analysis (A&A) as detailed in SECTION X of the SOQ Package.

At a minimum, for overhead-based firms, the following documents must be submitted to A&A within two weeks of contract award.

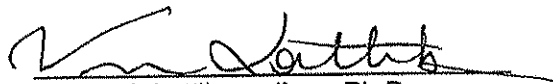
1. Completed Consultant Audit Questionnaire  
For Consultant Audit Questionnaire and other relevant reference materials, visit A&A website at [http://www.azdot.gov/inside\\_adot/audit/publications.asp](http://www.azdot.gov/inside_adot/audit/publications.asp)
2. Financial Schedules / Statements
3. Schedules of Indirect Costs

Additional information and supporting documentation may be requested by A&A as needed.

Subconsultants that are proposing Unit Rates or Commercial Pricing Rates may have different audit submittal requirements and should contact A&A for clarification.

Failure to comply with audit requirements by the established timeframe may substantially delay the contract execution and may be considered failed negotiations.

If you have any questions or require any additional information, contact A&A at (602) 712-7491.

  
Vivien H. Lattibeaudiere, Ph.D.  
ECS Director



## Arizona Department of Transportation

Engineering Consultants Section  
205 S. 17<sup>th</sup> Ave. Phoenix, Arizona 85007.3213  
Phone 602.712.7525 Fax 602.712.7424

Jane Dee Hull  
Governor

Mary E. Peters  
Director

April 25, 2001

Victor Mendez  
Deputy Director

### INFORMATION BULLETIN NO. 01-06

TO: ADOT Staff  
Consultants

FROM: Engineering Consultants Section

SUBJECT: ADOT CONSULTANT AUDIT CRITERIA

A handwritten signature in black ink, appearing to be "Smt", is written over the "FROM" line of the distribution list.

Please be advised that the Department has revised the Consultant Audit Criteria as per the attached.

We would appreciate it if your Chief Financial Officer is made aware of this Information Bulletin.

If you have questions regarding this bulletin, please call (602) 712-7525.

## **ADOT CONSULTANT AUDIT PROCESS**

(effective April 25, 2001)

- I. In continuing our process improvement, we have revised our proposal/audit criteria as follows:

- Firms doing a total of less than \$50,000 per year work through ECS –
  - A. **may** propose on a Unit Price of Work basis.
  - B. if a Unit Price of Work is proposed: the audit review will be limited in scope to a determination that the Consultant accounts for labor properly, has no "going concern" problems, and has proposed rates that are "fair and reasonable."
- Firms doing less than \$200,000 per year work through ECS -
  - A. must maintain a compliant accounting system.
  - B. must be aware of cost eligibility and required documentation.
  - C. will provide an Overhead Schedule (in proper format), Tax Return, and Trial Balance as well as details of Executive Compensation, Fringe Benefits, and Related Party Transactions for audit review by ADOT Audit & Analysis (A&A).

Note: Based on A&A's review recommendations, ECS will negotiate rates on Cost Plus Fixed Fee (CPFF) contracts. These contracts will be subject to final audit only for suspected fraud or abuse.

- I. In implementing Section 307 of the 1995 National Highway System Designation Act, ADOT is offering Consultants doing over \$200,000 per year work through ECS the following review options:
- submission of the Consultant Audit Questionnaire and related documentation;
  - submission of an independent Certified Public Accounting (CPA) Overhead Report meeting the American Consulting Engineers Council/American Association of State Highway and Transportation Officials/Federal Highway Agency (ACEC/AASHTO/FHWA) Guidelines for the Consultant's most recent year-end (A&A may review the CPA workpapers);
  - submission of a Cognizant Report (as defined in the ACEC/AASHTO/FHWA Guidelines) from another state for the Consultant's most recent year-end.



- I. In continuing our process improvement, Incurred Cost/Final Audits for Firms doing over \$150,000 per year work through ECS will be treated as follows –
  - General – Lump-sum contracts shall not be subject to final audit except on a sample basis to determine the efficiency of the ADOT negotiation Process for its own internal control purposes, or for suspected fraud or abuse. The State Engineer will participate in the decision to audit any lump-sum contracts.
  - Overhead – A CPA Report or a Cognizant Report from another state meeting ACEC/AASHTO/FHWA Guidelines is acceptable for Incurred Cost/Final audits. A&A may review the CPA workpapers as provided for in the AASHTO Audit Subcommittee procedures. In the absence of either of these alternatives, A&A will audit the overhead based on submission of the Consultant Audit Questionnaire and related documentation.
  - Incurred Costs (Other than Overhead) – Consultants will be audited on a three-year rotation. The audits will cover all open contracts, both those that have been completed during the period and those which are still in progress.

**SECTION X**

**BOILER PLATE CONTRACT**

Contract No.: 09-027

Contract No.: 09-027  
TRACS No.: VARIOUS  
Project No.: VARIOUS

A.G. Contract No: KR94-1408ALS

**CONSULTANT CONTRACT**

This CONTRACT is made and entered into on \_\_\_\_\_, 20\_\_ by and between the State of Arizona, Arizona Department of Transportation, Intermodal Transportation Division, acting by and through the Director, hereinafter called STATE, and

(Consultants Name and Address Inserted Here)

hereinafter called the CONSULTANT.

The Description and Location of the CONTRACT and related project(s) are as follows:

**Description:**

MANAGEMENT CONSULTANT FOR  
STATEWIDE LOCAL GOVERNMENTS  
ECONOMIC STIMULUS PROGRAM

**Location:**

VARIOUS STATEWIDE LOCATIONS

**RECITALS**

1. The STATE desires that professional engineering services as Management Consultants are provided for the above location. The trained personnel needed for the CONTRACT and related project(s) are not currently available within its own organization.
2. The CONSULTANT firm with its principals and employees is considered to be qualified and otherwise capable of performing the work required by this contract in the time allotted.
3. Therefore, pursuant to Arizona Revised Statutes, Section 28-1803(5) it is deemed to be in the public interest to enter into this contract.

**AGREEMENT**

Therefore, in consideration of these premises and of the mutual clauses and agreements herein contained, and the faithful performance thereof, the CONSULTANT and the STATE contract and agree:

**2.01 SCOPE OF WORK**

The CONSULTANT shall perform engineering services for the satisfactory completion of the CONTRACT and related project(s) as detailed and described in the following Scope of Work dated December 2008 which is considered to be a part of this CONTRACT.

(Scope of Work Inserted Here)

**3.01 CONTRACT SCHEDULE AND COMPLETION DATE**

Work on the CONTRACT and related project(s) is scheduled to commence on \_\_\_\_\_. Work is to be completed within 365\_ calendar days from notice to proceed for an estimated completion date of \_\_\_\_\_, 20\_\_\_\_\_. The STATE assumes no liability for work performed or costs incurred prior to the beginning date or subsequent to the CONTRACT completion date. Extensions of time allowed for completing the CONTRACT may be granted under appropriate circumstances.

**3.02 CONSULTANTS COMPENSATION – VARIES BY TASK ASSIGNMENT**

The method of compensation will vary based upon the Task Assignment and the type of CONSULTANT'S services that shall be used. Costs for each Task Assignment will be derived from the rates as shown in the Contract, Appendix E.

Costs are to be identified separately for each Task Assignment. Costs for each Task Assignment must not exceed the amounts budgeted during the contract time frame without prior written approval of the STATE.

The method of payment per Task Assignment will be determined by the STATE.

The Negotiated Provisional overhead rate for office of \_\_\_\_\_% and for field of \_\_\_\_\_% will be set until receipt the Pre-Negotiation Audit Review. A contract modification will be executed to establish the Negotiated overhead rate for the term of the contract. The Overhead rate, Direct Expenses and Fee are subject to change pending Pre-Negotiation Audit Review. A one time redetermination adjustment in the total amount paid or to be paid on all payment reports shall be made to reflect the established overhead rate and any resulting additional payments, refunds, or credits shall be made promptly. The contract Notice to Proceed date will be the effective date for all redetermination of costs.

Facilities Capital Cost of Money will be allowed when properly supported. The provisional rate for this contract is \_\_\_\_\_%.

CONSULTANT'S total compensation for work performed on this CONTRACT and related project(s) shall not exceed the sum of \$\_\_\_\_\_ plus approved adjustments.

**1. LUMP SUM**

- a. If the Task Assignment's method of payment has been designated on this CONTRACT is Lump Sum. Total compensation for the Task Assignment and work performed shall not exceed the authorized Task Assignment Amount plus approved adjustments.

**2. SPECIFIC RATES OF COMPENSATION**

- a. If the Task Assignment's method of payment has been designated on this CONTRACT is Specific Rates of Compensation.
- b. The Specific Billing Rate includes the CONSULTANT'S direct labor, approved overhead rate and fixed fee costs.

3. POST DESIGN SERVICES

CONSULTANT'S compensation for Post Design Services will begin at construction bid date and will be at specific hourly rates (to include direct labor, approved overhead rate and fixed fee) as set forth in the CONTRACT, plus direct expenses approved by the Department. Rates are subject to negotiation prior to execution of this phase. Identification of personnel within each classification may be required by the ADOT Project Manager. Authorization for post-design services will be executed by Contract Modification.

4. COST PLUS FIXED FEE

- a. If the Task Assignment's method of payment has been designated on this CONTRACT is Cost Plus Fixed Fee. Costs for each Task Assignment will be derived from the rates as shown in the Contract, Appendix E.
  - b. Total compensation for the Task Assignment and work performed shall not exceed the authorized Task Assignment Amount plus approved adjustments.
  - c. Task Assignments shall consist of two parts:
    - (1) All the allowable costs incurred as defined by Task Assignment.
    - (2) A fixed fee for rendering of the professional services herein contemplated by Task Assignment.
5. The STATE shall not withhold retention on progress payments. However, if satisfactory progress has not been made, the STATE may first retain a maximum of 10% of the current and subsequent billings, or secondly, the STATE may refuse to make full progress payment(s) of such sums which are considered necessary.
6. Final payment shall be made as soon as possible after 60 days from the date of acceptance of the audit findings, if applicable, by the STATE and the CONSULTANT.
7. In the event the STATE requires substantial changes in the scope, character or complexity of the work on the CONTRACT, the total compensation as well the fixed fee portion may be re-evaluated and adjusted to a greater or lesser amount by mutual agreement between the CONSULTANT and the STATE.
9. In the event this CONTRACT is terminated by the STATE as herein provided, the CONSULTANT may be paid all the allowable costs incurred, including mobilization and demobilization expense, plus that portion of the fixed fee earned to date of termination as determined by the STATE. Mobilization and demobilization expenses shall include only reasonable costs of marshalling personnel (and equipment if specifically provided for in the contract) for performing this work and of terminating employment of such personnel. No costs will be allowable in connection with termination of employment if incurred later than fifteen (15) days after the date of termination. Costs will be determined as provided in the Federal Acquisition Regulations and may be verified by an audit.
10. The STATE shall pay the CONSULTANT in installments based upon Progress and Final Payment Reports and Work Hour Reports submitted by the Consultant. A summary of costs billed by category or subcategory, as required by ADOT, is to be included with the invoice. The Payment Reports shall show allowable costs incurred

to date under the CONTRACT and the pro-rata portion of the fixed fee earned, with the CONTRACT billed amount subject to the following limitations:

11. "Costs" as used in this context shall be construed to mean the CONSULTANT'S actual, reasonable costs, subject to any limitation set forth in this CONTRACT, attributable and properly applicable to the conduct of the CONSULTANT'S business in the performance of this CONTRACT in accordance with procedures as set forth in Chapter 1 of the Federal Acquisitions Regulation, 48 CFR 31.2 and ADOT Contract Cost Allowability Guidelines. Costs for each subcategory (line item) shall not exceed the allowable rates as set forth on the DERIVATION OF COST PROPOSAL located in the SCOPE OF WORK section, Appendix E of the CONTRACT, or are approved by contract modification, or by Administrative Determination Letter, as applicable. Such costs shall be allocated to the following categories and respective subcategories and may include, but are not necessarily limited to:

- a. Direct Labor

Gross Salaries and/or wages paid to employees for work on the CONTRACT and related project(s), for time actually spent by CONSULTANT'S employees in direct productive efforts. Regarding CONSULTANT'S employees who charge their time to projects, their non-project pay, such as holiday pay, vacation pay, or any other form of indirect pay which is included in the employees' gross wages, will not be charged as direct labor to the CONTRACT or to related project(s). Non-project pay is to be included in 3.02 14.b.(2). Also payments to individuals other than the CONSULTANT'S employees are specifically excluded as direct labor costs. Payment of premium overtime (i.e., time and a-half or double time, over and above the normal 40 hour work week) must have the prior written approval of the STATE. If payment of premium overtime is approved, it will be treated consistently with Consultant's accounting policies.

- b. Indirect Costs (Overhead)

- (1) Applicable to straight time portion of Direct Labor only, as defined in 3.02 14.a.
- (2) Indirect labor which includes non-project pay to CONSULTANT'S employees who normally charge their time to projects, salaries and wages paid to support staff such as secretarial, clerical and custodial, plus managerial employees whose time is not considered chargeable project time to this CONTRACT and related project(s) or any other specific project of the CONSULTANT.
- (3) Payroll costs-taxes and fringe benefits such as matching funds or employer's contributions paid for employee's social security, unemployment compensation, worker's compensation insurance, medical/dental life or disability insurance, pension plans, dependent care or medical expense reimbursement accounts, or similar employee benefits.
- (4) Payment to the CONSULTANT for Indirect Costs shall be made pursuant to Federal Acquisition Regulation, 48 CFR Chapter 1 Part 31.2, and ADOT Contract Cost Allowability Guidelines and Policies. During the period of the CONTRACT, partial payments will include payments for indirect costs at a provisional rate established by the pre-negotiation review by the audit and analysis office of the department.

- (5) The CONSULTANT is responsible for identifying its costs as allowable and unallowable pursuant to FAR 48 CFR Chapter 1 Part 31.2 and ADOT Contract Cost Allowability Guidelines and Policies. Within five months after the CONSULTANT'S fiscal year-end, the CONSULTANT will have properly accounted for its allowable Indirect Costs (Overhead) as set forth herein.

(a) If the actual Overhead rate is lower than the provisional rate used, the CONSULTANT must determine the difference on the progress billings previously paid by the STATE, and remit to the STATE the amount overpaid by the STATE no later than the end of the sixth month following its fiscal year-end. If the CONSULTANT fails to comply with this condition, a penalty of 20% of the over-paid amount will be assessed. If by the end of the sixth month the CONSULTANT has not remitted either the over-paid amount or the penalty thereon, interest of 1% per month will be charged on the unpaid amount until all amounts owing have been paid. Interest will cease to accrue should the combined amount of penalties and interest accumulate to a maximum of 33% of the amount over-paid by the STATE.

(b) If the actual Overhead rate is higher than the provisional rate used, the CONSULTANT may determine the amount of additional Overhead due and request payment of same. The payment request must be properly documented and certified by the Chief Financial Officer of the CONSULTANT. The maximum Overhead allowed, will be the CONSULTANT'S actual percentage for the fiscal year as determined by 3.02.14.b.(5).

(c) If the CONTRACT period exceeds one fiscal year of the CONSULTANT, the provisional rate should be modified to more correctly reflect the actual experience or anticipated experience of the CONSULTANT or any of its Subconsultants, if applicable. Either the STATE or the CONSULTANT may initiate the request to modify the provisional rate to prevent substantial overpayment or underpayment.

- (6) Upon completion of the CONTRACT, a final determination of Indirect Costs (Overhead) may be made based on an audit of financial records pursuant to 3.02.14.e.

c. Other Direct Costs

Direct expenses for travel, subsistence, per diem, or other mutually agreed upon expenses of a non routine nature which can be identified directly to the CONTRACT and related project(s). Out of State travel must have prior approval of the STATE.

During performance of progress or final audits, the allowability of direct costs will be contingent upon the CONSULTANT'S ability to demonstrate that these costs were excluded from the overhead cost pool.

d. Outside Services



Salaries and wages paid to individuals, other than the CONSULTANT'S regular employees, such as payments to other consultants, subconsultants, subcontractors or vendors for engineering and professional services directly attributable to the CONTRACT.

e. Audit of CONSULTANT'S Business Operations and Financial Records

- (1) All costs billed to the STATE are subject to audit. The CONSULTANT, and by way of subcontract, all subcontractors or Subconsultants, shall allow the designated STATE auditors to perform an audit as deemed appropriate. Such an audit will take into consideration consistent application of Generally Accepted Accounting Principles and Contract Cost Principles and Procedures as set forth in Chapter 1 of the Federal Acquisition Regulations System, 48 CFR Part 31.2 and any other mutually agreed upon policies or regulations.
- (2) The CONSULTANT shall insert in each of its subcontracts the above requirement and also a clause requiring its Subconsultants to include the above requirement in any lower-tier subcontracts.

4.01 CONSULTANT AND SUBCONSULTANT PAYMENT

The CONSULTANT shall submit invoices on a regularly monthly basis in accordance with a timetable agreed to in contract negotiations. Invoices should be sent directly to ADOT Project Manager or Project Monitor.

The CONSULTANT will submit invoices for work performed by their Sub-consultants even though the prime CONSULTANT may not have performed working during the preceding month.

On or before the seventh day after the STATE makes a progress payment to the CONSULTANT, the CONSULTANT shall pay the Sub-consultants for the work performed to the extent of each Sub-consultant's contractual interest in the progress payment.

4.02 CONTRACT MODIFICATIONS

1. Contract modifications, defining and limiting the terms of the contract and compensation, must be approved by the STATE, and shall be submitted in the form and format provided by the STATE. The CONSULTANT will be compensated only with prior written authorization by the STATE. Any administrative/technical costs associated with the preparation of said modifications are solely the responsibility of the CONSULTANT.

a. Supplemental Agreements

Significant changes in the scope, character, or complexity of the work may be negotiated if it is mutually agreed that such changes are desirable and necessary. Contract changes defining and limiting the work and compensation must be authorized by the STATE. Such supplemental agreement(s) shall be made in writing, and it is expressly understood and agreed that no claim for extra work performed or materials furnished shall be made by the

CONSULTANT until authorization to proceed is granted, in writing, by the STATE.

b. Changes Orders

The STATE may at any time, by written order, and without notice to sureties, if any, make (or direct) changes within the general scope of this CONTRACT in the services to be performed.

**4.03 DELAYS AND EXTENSIONS**

The CONSULTANT agrees that no charges or claims for damages shall be made against the STATE for any delays or hindrances during the progress of this CONTRACT. Such delays or hindrances, if any, will be covered by an extension of time for such reasonable period as mutually agreed upon between the parties. It is agreed and understood, however, that permission to proceed with the CONTRACT after the established completion date, shall not be construed as a waiver by the STATE of any of its rights herein.

**4.04 LATE SUBMITTAL OF INVOICE**

Unless waived by the STATE, in writing, all invoices for work performed under this CONTRACT shall be submitted within 60 days from date of acceptance of the completed portion of the work performed.

**4.05 PERFORMANCE EVALUATIONS**

The CONSULTANT'S performance will be evaluated periodically in accordance with the schedule set forth in Appendix\_\_\_\_\_ of this CONTRACT.

**4.06 GENERAL COMPLIANCE WITH LAWS**

The CONSULTANT shall comply with all Federal and State laws, and local ordinances and regulations.

**4.07 LITIGATION**

In the event of litigation between the CONSULTANT and the STATE involving this CONTRACT, the laws and decisions of the State of Arizona shall apply and any such litigation shall be commenced and prosecuted in the appropriate court of competent jurisdiction of the Federal or State Court System within the geographical boundaries of the State of Arizona.

**4.08 DISPUTE ESCALATION (Administrative Review)**

A written dispute escalation process will be utilized to resolve questions of fact during the course of this CONTRACT. The final determination will be made by the STATE.

**4.09 ARBITRATION**

The parties agree to use arbitration, after exhausting applicable administrative reviews, to resolve disputes arising out of this agreement where the sole relief sought is monetary damages of \$100,000, or less, exclusive of interest and costs.

#### 4.10 TERMINATION, POSTPONEMENT OR ABANDONMENT

1. The right is reserved by the STATE to terminate, indefinitely postpone work, or abandon the CONTRACT. The STATE may terminate this CONTRACT in any one of the following circumstances:
  - a. Failure of the CONSULTANT to perform the services as detailed herein and in any modifications to this CONTRACT.
  - b. Failure of the CONSULTANT to complete this CONTRACT within the time specified herein and in any modifications to this CONTRACT.
  - c. Failure of the CONSULTANT to comply with any of the terms of this CONTRACT.
  - d. When, for any reason, the STATE shall determine that such termination is in its best interest.
2. If the STATE contemplates termination under the provisions of paragraphs 1.a., 1.b., or 1.c. above, the CONSULTANT shall have five (5) days in which to cure such failure. In the event the CONSULTANT does not cure such failure, the STATE may terminate the CONTRACT without further consideration.
3. If, after Notice of Termination of this CONTRACT under the provisions of 1.a., 1.b. or 1.c. of this clause, it is determined that the CONSULTANT was not in violation or default, the Notice of Termination shall be deemed to have been issued under the terms of 1.d. of this clause.
4. Termination shall be effected by delivery to the CONSULTANT of a Notice of Termination specifying whether termination is for default of the CONSULTANT or for the convenience of the STATE, the extent to which performance of the CONTRACT is terminated, and the date upon which such termination becomes effective.
5. In the event of termination, the STATE shall be liable to the CONSULTANT only to the extent and as provided in SECTION 3.02 (CONSULTANTS'S COMPENSATION) of this CONTRACT.
6. In the event this CONTRACT is terminated, the STATE shall have the option of completing the CONTRACT, or entering into an agreement with another party for the completion of this CONTRACT according to the provisions and agreements herein.
7. If the STATE exercises this option, all costs and charges incurred by the STATE, together with the cost of completing the work under CONTRACT, will be deducted from any monies due or which may become due the CONSULTANT.

#### 4.11 CANCELLATION OF STATE CONTRACTS

In accordance with Arizona Revised Statutes 38-511, the STATE may cancel any CONTRACT, without penalty or further obligation, made after the effective date of this section by the

STATE or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the CONTRACT on behalf of the STATE or any of its departments or agencies is, at any time while the CONTRACT or any extension of the CONTRACT is in effect, an employee of any other party to the CONTRACT in any capacity or a CONSULTANT to any other party of the CONTRACT with respect to the subject matter of the CONTRACT. The cancellation shall be effective when written notice from the STATE is received by all other parties to the CONTRACT unless the notice specifies a later time.

#### 4.12 SUCCESSORS AND ASSIGNS

The CONSULTANT and all successors, executors, administrators and assigns of CONSULTANT'S interest in the work or the compensation herein provided shall be bound to the STATE to the full legal extent to which the CONSULTANT is bound with respect to each of the terms and agreements of this CONTRACT.

#### 4.13 CONTINUING OBLIGATION

The CONSULTANT agrees that if because of death or any other occurrence it becomes impossible for any principal or employee of the CONSULTANT to render the services required under this CONTRACT, neither the CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, the STATE may terminate this CONTRACT if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect the CONSULTANT'S ability to satisfactorily complete the performance of this CONTRACT.

#### 4.14 INSURANCE

1. Without limiting any liabilities or any other obligations of the CONSULTANT, the CONSULTANT shall provide and maintain the minimum insurance coverage listed below. Coverage will be provided with forms and insurers acceptable to ADOT and maintained at a minimum until obligations under this CONTRACT are satisfied.
  - a. If applicable, Workmen's Compensation insurance to cover obligations imposed by Federal and State statutes having jurisdiction of its employees engaged in the performance of the services, and Employers' Liability insurance with a minimum limit of one hundred thousand dollars (\$100,000). Evidence of qualified self-insured status shall suffice for this section.
  - b. Architects' and Engineer's Professional Liability insurance in the amount of one million dollars (\$1,000,000) each claim, with said coverage to remain in force and effect for a minimum of one year past ADOT's acceptance of the CONTRACT.
  - c. Comprehensive General Liability insurance with a minimum combined single limit of one million dollars (\$1,000,000) each occurrence. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, contractors protective, products and completed operations. Said policy shall contain a severability of interest clause.
  - d. Commercial Automobile Liability coverage with a combined single limit for bodily injury and property damage of not less than one million dollars (\$1,000,000) for all owned, leased, hired and non-owned vehicles. The State of

Arizona and the Arizona Department of Transportation must be named as Additional Insureds and Certificate Holder on the policy.

- e. Valuable Papers insurance in an amount sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the work of the CONSULTANT used in the completion of this CONTRACT.
- f. The policy required by Sections c. and e. above shall be endorsed to include the STATE and ADOT, its agents and officials and employees as additional insureds and shall stipulate that the insurance afforded CONSULTANT shall be primary insurance and that any insurance carried by ADOT, its agents, officials or employees shall be excess and not contributory insurance to that provided by CONSULTANT.
- g. A certificate of insurance acceptable to ADOT shall be issued to ADOT prior to commencement of the CONTRACT as evidence that policies providing the required coverages, conditions and limits are in full force and effect. Such certificate shall contain provisions that coverage afforded under the policies will not be cancelled, terminated or materially altered until at least 30 days prior written notice has been given to ADOT.

#### 4.15 INDEMNIFICATION - RESPONSIBILITY FOR CLAIMS AND LIABILITIES

##### 1. For Professional Liability

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

##### 2. For Other than Professional Liability

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

#### 4.16 ANTITRUST VIOLATIONS

The CONSULTANT and the STATE recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact borne by Purchaser or ultimate user: in this case, the STATE. Therefore, CONSULTANT, acting as a Vendor, hereby assigns to the STATE any and all claims for such overcharges.

#### 4.17 LIQUIDATED DAMAGES

(This is an optional provision applied, on an exception basis, primarily to contracts initiated and administered by the Arizona Transportation Research Center - Not applicable to this contract)

**4.18 CONSULTANT'S RESPONSIBILITY**

The CONSULTANT has total responsibility for the accuracy and correctness of plans and related data prepared under the terms of this CONTRACT, and shall check all such material accordingly for completeness, missing items, correct multipliers and consistency. The plans will be reviewed by ADOT for conformity with ADOT procedures and contract terms. Review by ADOT does not include detailed review or checking of design of major components and related details or the accuracy with which such designs are depicted on the plans.

**4.19 ACCURACY OF WORK**

Acceptance of the work by the STATE will not relieve the CONSULTANT of the responsibility for subsequent correction of any such errors and the clarification of any ambiguities. The CONSULTANT shall make all necessary revisions or corrections resulting from errors and omissions on the part of the CONSULTANT without additional compensation.

**4.20 CONSULTANT'S ENDORSEMENT OF PLANS, ETC.**

The CONSULTANT'S seal shall be endorsed and affixed to plans, reports and engineering data furnished under this CONTRACT.

**4.21 PROFESSIONAL CONDUCT**

The CONSULTANT shall comply with the provisions of A.C.R.R.4-30-301 (which is the official compilation of the Administrative Rules and Regulations for the State of Arizona), entitled Rules of Professional Conduct, Rules of the State Board of Technical Registration for Architects, Assayers, Engineers, Geologists, Landscape Architects and Land Surveyors, which are incorporated herein by reference and hereby made a part of the CONTRACT.

**4.22 IMPROPER EXERCISE OF AUTHORITY**

It is further understood and agreed that the CONSULTANT shall not in any way exercise any portion of the authority or powers of the State of Arizona, and shall not make a contract or commitment, or in any way represent itself as an agent of the State of Arizona beyond the scope of this CONTRACT unless expressly authorized, in writing, by the STATE.

**4.23 CONFLICTS OF INTEREST**

1. The CONSULTANT shall not engage the services on this CONTRACT of any present or former STATE employee who was involved as a decision maker in the selection or approval processes or who negotiated and/or approved billings or contract modifications for this CONTRACT.

2. The CONSULTANT agrees that no public or private interest exists and none shall be acquired directly or indirectly which would conflict in any manner with the performance of the CONTRACT.

#### 4.24 ORGANIZATIONAL CONFLICTS OF INTEREST

1. No contract for the construction of a project shall be awarded to the firm that designed the project, or its subsidiaries, affiliates, the parent company or subconsultants, except with the written approval of the STATE.
2. The applicability of the above also applies to a Management and/or General Consultant or any of its subsidiaries, affiliates, the parent company or subconsultants that were involved in any aspect of the design process.

##### 4.24.1 CONSULTANT - CONTRACTOR CONFLICTS OF INTEREST

The CONSULTANT agrees that it shall not perform services on this project for the contractor, sub-contractor or any supplier.

The CONSULTANT shall not negotiate, contract, or make any agreement with the contractor, subcontractor or any supplier with regard to any of the work under this project, or any services, equipment or facilities to be used on this project.

#### 4.25 ORGANIZATION EMPLOYMENT DISCLAIMER

1. The CONTRACT is not intended to constitute, create, give to, or otherwise recognize a joint venture agreement or relationship, partnership, or formal business organization of any kind, and the rights and obligations of the parties shall be only those expressly set forth in the CONTRACT.
2. The parties agree that no persons supplied by the CONSULTANT in the performance of CONSULTANT's obligations under the CONTRACT are considered to be STATE employees, and that no rights of State civil service, retirement or personnel rules accrue to such persons. The CONSULTANT shall have total responsibility for all salaries, wages, bonuses, retirement, withholdings, workmen's compensation, occupational disease compensation, unemployment compensation, other employee benefits and all taxes and premiums appurtenant thereto concerning such persons, and shall save and hold the STATE harmless with respect thereto.

#### 4.26 NONPROCUREMENT DEBARMENT AND SUSPENSION

1. In accordance with 49 CFR 29.505, and by signature on this CONTRACT, the CONSULTANT certifies its' compliance, and the compliance of any subconsultants or subcontractors present or future, by stating that any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position of authority involving Federal Funds:
  - a) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal Agency;
  - b) does not have a proposed debarment pending;

- c) has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal Agency within the past 3 years; and
- d) has not been indicted, convicted, or had a civil judgment rendered against the firm by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years as specified by 49 CFR paragraph 29.305(a).

Where the CONSULTANT or subconsultant is unable to certify to the statement in 4.26.1(a) above, the CONSULTANT or subconsultant will be declared ineligible to enter into CONTRACT or participate in the project.

Where the CONSULTANT is unable to certify to any of the statements as listed in 4.26.1 (b), (c) or (d), the CONSULTANT shall submit a written explanation to the STATE. The certification or explanation will be considered in connection with the STATE's determination whether to enter into CONTRACT.

- 2. The CONSULTANT shall provide immediate written notice to the Department if at any time the CONSULTANT or any subconsultants or subcontractors, present or future, learn that its Debarment and Suspension certification has become erroneous by reason of changed circumstances.

#### 4.27 COVENANT AGAINST CONTINGENT FEES

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this CONTRACT, and that he has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this CONTRACT. For breach or violation of this warranty, the STATE shall have the right to annul this CONTRACT without liability, or in its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

#### 4.28 SUBLETTING, ASSIGNMENTS AND TRANSFERS

The CONSULTANT firm was chosen to perform the work on this CONTRACT based upon training and qualifications of its members. Therefore, subletting, assignment or transfer of any work to subconsultants and lower tier subconsultants, unless approved in writing by the STATE prior to performance of work, is expressly prohibited.

#### 4.29 SUBCONSULTANTS

- 1. The CONSULTANT may retain Subconsultants on an "as required" basis, provided that the Subconsultants selected, and the rates to be paid, are identified on each Subconsultant's DERIVATION OF COST PROPOSAL located in the SCOPE OF WORK section, Appendix of the CONTRACT, or are approved by contract modification, or by Administrative Determination Letter, as applicable. All Subconsultants shall be required to follow the terms and conditions of this CONTRACT.
  - a. Subconsultants' Compensation



Each Subconsultant will be expected to follow covenants set forth in 3.02 2. unless the subcontract is considered a Lump Sum by Task (fixed price) subcontract and not a Costs Plus Fixed Fee subcontract. However, with respect to 3.02 2.b.(5), the Indirect Costs (Overhead) rates for each Subconsultant, when applicable, will be the actual allowable overhead rate or the Negotiated Provisional rate stipulated in each Subconsultant's final DERIVATION OF COST PROPOSAL, as concurred with by the STATE. Each Subconsultant's actual allowable overhead rate or the negotiated provisional Overhead rate is separately determined and may not be the same rate as stipulated for the CONSULTANT.

**b. CONSULTANT'S Responsibility Regarding Subconsultant's Costs**

The Subconsultant's allowable costs shall be governed by 3.02 2. The CONSULTANT shall monitor the billings received from the Subconsultants and ensure that all costs are documented and supported.

Regarding Indirect Costs (Overhead), the CONSULTANT is responsible for determining that the Subconsultants comply with 3.02 2.b.(6) with respect to the actual allowable or negotiated provisional Overhead rates. The Overhead rates for Subconsultants are "actual allowable" or "negotiated provisional", and must be accounted for annually. A Subconsultant may not bill more than its actual allowable Overhead rate or the negotiated provisional Overhead rate. In the event any Subconsultant violates this subsection, the penalties set forth in 3.02 2.b.(6)(a) will be assessed to the CONSULTANT.

All costs of the Subconsultants are subject to audit unless waived by the STATE. The cost to the STATE for Subconsultants shall be in amounts equal to the actual allowable costs paid to the Subconsultants.

2. The volume of work performed by the Subconsultants shall not exceed 49% of the total contract value unless waived by the STATE.

**4.30 SUBCONTRACTS**

The CONSULTANT agrees to insert in all subcontracts the clauses hereof entitled "Civil Rights," "Affirmative Action," "Ownership of Documents," "Patents and Copyrights", "Anti Lobbying and Disclosure," "Retention of Records" and "Immigration". The CONSULTANT further agrees to insert in any subcontract exceeding \$100,000 the clause hereof entitled "Environmental Protection."

**4.31 KEY PERSONNEL**

Any substitution or transfer of personnel specifically identified in CONSULTANT'S proposal as assigned to the work of this CONTRACT shall be subject to prior written approval by the STATE.

**4.32 EMPLOYMENT OF PERSONNEL OF PUBLIC AGENCIES**

The CONSULTANT shall not engage the service of any person or persons then in the employ of the STATE for work covered by the terms of this CONTRACT without the prior written approval of the STATE.

#### 4.33 ANTI-LOBBYING

1. The CONSULTANT agrees to comply with the provisions of Section 1352 of Title 31, U.S.Code (Public Law 101.121) as codified in Title 48, Federal Acquisition Regulations Subpart 3.8 and Subpart 52.203-11. The legislation prohibits federal funds from being expended by a recipient or any lower tier sub-recipients of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence a Federal agency or Congress in connection with the award of any Federal contract, cooperative agreement, including the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement. All disclosure statements are to be furnished to the STATE.
2. The CONSULTANT agrees to require all subconsultants and lower tier subconsultants who have agreements exceeding \$100,000 to complete the Certification of Federal Contracts (ECS Form 90-1) and, when appropriate, the Disclosure of Lobbying Activities (ECS Form 90-3) prior to execution of the Prime Consultants Agreement with the STATE. Lower tier certifications are to be maintained by the CONSULTANT.

#### 4.34 OWNERSHIP OF DATA

1. The CONSULTANT agrees to maintain (in sufficient detail as will properly reflect all work done and results achieved in the performance of this CONTRACT) tracings, plans, specifications and maps, basic survey notes and sketches, books, records, reports, research notes, charts, graphs, comments, computations, analyses, recordings, photographs, computer programs and documentation thereof, and other graphic or written data generated in connection with the work called for in the CONTRACT; all such information and documentation to be termed "Data" under this CONTRACT.
2. All Data procured hereunder for the work funded by ADOT shall become the property of ADOT and delivered to ADOT upon request, and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE; provided however, that CONSULTANT shall not be required to retain any Data not requested by ADOT within five years from the date of final payment to the CONSULTANT hereunder; and provided further that until such delivery to ADOT the CONSULTANT agrees to permit representatives of ADOT and the Federal Highway Administration to examine and review at reasonable times all Data still in the possession of the CONSULTANT.
3. All services, information, computer program elements, reports and other deliverables which may be patented or copyrighted and created under this CONTRACT are the property of the State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

#### 4.35 ADOT PRODUCTS

ADOT will provide the consultant with the ADOT developed software for the sole purpose of completing this contract, as set forth in the Site License Contract (which includes a detailed list of Software that will be provided to the consultant). The software is provided to the consultant solely for the purpose of completing this contract and for no other purposes. ADOT developed software including: manuals, electronic information, programs, and associated materials, remains the property of ADOT. Any use of this software for purposes other than the fulfillment of this contract is strictly prohibited. The consultant shall not copy the software or provide, distribute or demonstrate the software to other entities. Upon completion of the contract or when otherwise notified by ADOT, the contractor will return all software, backup copies, manuals, electronic information and associated materials to ADOT.

**4.36 RETENTION OF RECORDS**

1. The CONSULTANT and any subconsultant/subcontractor/vendor shall keep and maintain all books, papers, records, accounting records, files, accounts, reports, costs proposals with backup data and all other material relating to the CONTRACT and related project(s), and shall make all such material available at any reasonable time during the term of work on the CONTRACT and related project(s) and for five (5) years from the date of final payment to the CONSULTANT for auditing, inspection and copying upon the STATE'S request, or at the request of the Federal Highway Administration or any other authorized representative of the Federal Government.
2. The CONSULTANT shall insert in each of its subcontracts the above requirement and also a clause requiring its subconsultants to include the above requirement in any lower-tier subcontracts or purchase orders.

**4.37 REVIEW AND INSPECTION**

Representatives of the STATE and the Federal Highway Administration are authorized to review and inspect the CONTRACT activities and facilities during normal business hours.

**4.38 PROPERTY OR EQUIPMENT**

Except as otherwise provided in this CONTRACT, the lease, rental or purchase of property or equipment to perform the work herein described must have the prior written approval of the STATE. The control, utilization and disposition of property or equipment acquired using FEDERAL/STATE funds shall be determined by the STATE in accordance with the property management standards set forth in 49 CFR Part 18 , ADOT Manual - FIN 11.02, and Highways Division Policy and Implementation Memorandum No. 89-04.

**4.39 CIVIL RIGHTS**

1. The CONSULTANT is required to comply with Executive Order 75-5, "Non-discrimination in Employment by Government Contractors and Subcontractors," which is hereby included in its entirety by reference and considered a part of this CONTRACT.
2. The CONSULTANT is required to comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, Title 49, Code of Federal Regulations, Part 21 through Appendix H and Title 23, CFR 710.405 (b) are made applicable by reference and are hereinafter considered a part of this CONTRACT.
3. The CONSULTANT is required to comply with the provisions of Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor Regulations (41-CFR Part 60). Said provisions are made applicable by reference and are hereinafter considered a part of this CONTRACT.
4. The CONSULTANT shall post in conspicuous places available to employees and applicants for employment, the following notice:

It is the policy of this company not to discriminate against any employee, or applicant for employment, because of race, color, religion, creed, national origin, sex, age, handicapped, or disabled veterans and Vietnam era veterans. Such actions shall include, but are not limited to: employment, upgrading, demotion, transfer, recruitment, or recruitment advertising; laying-off or termination; rates of pay or other compensation; and selection for training, and on-the-job training. Also, it is the policy to insure and maintain a working environment free of harassment, intimidation and coercion.

#### **4.40 AFFIRMATIVE ACTION**

CONSULTANT shall take the following affirmative action steps with respect to securing supplies, equipment or services under the terms of this CONTRACT:

1. Include qualified firms owned by socially and economically disadvantaged individuals on solicitation lists.
2. Assure that firms owned by socially and economically disadvantaged individuals are solicited whenever they are potential sources.
3. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by firms owned by socially and economically disadvantaged individuals.
4. Where the requirement permits, establishing delivery schedules which will encourage participation by firms owned by socially and economically disadvantaged individuals.
5. Use the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise of the Department of Commerce and the Community Services Administration as required.

#### **4.41 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES**

The CONSULTANT is required to adhere to the commitment made to participation by ADOT certified Disadvantaged Business Enterprises (DBE) as indicated in the firms Technical Proposal or subsequently agreed to by the STATE during negotiations. The STATE, at its discretion on a case by case basis, may waive the above limitations.

The CONSULTANT must submit the DBE Compliance Report to the Civil Rights Office by the 3<sup>rd</sup> Friday of each month. The report shall indicate the amount earned by and paid to each DBE working on the project for the preceding month.

#### **4.42 ENVIRONMENTAL PROTECTION**

(This clause is applicable if this contract exceeds \$100,000.00. It applies to Federal Aid Contracts Only.)

CONSULTANT is required to comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. Violations shall be reported to the Federal Highway Administration and to the U.S.E.P.A. Assistant Administrator for Enforcement. (EN-329).

**4.43 ENERGY CONSERVATION**

(This clause is applicable to Federal Aid Contracts Only.)

CONSULTANT is required to comply with mandatory standards and policies, as applicable, relating to energy efficiency which are contained in the State Energy Conservation Plan issued by the State of Arizona in compliance with the Energy Policy Conservation Act (P.L. 94-163).

**4.44 PUBLICATION PROVISIONS**

The CONSULTANT shall provide annual, quarterly or monthly written progress reports requested by the STATE. Prior to completion of the CONTRACT and related project(s), the CONSULTANT shall prepare a final report summarizing activities, conclusions, and recommendations in a form as prescribed by the STATE, and this report shall be a prerequisite for final payment. Publication rights to all reports are reserved by the STATE. The CONSULTANT shall not release information developed under the CONTRACT prior to publication, except upon written approval of the STATE.

**4.45 PUBLICATION PROVISIONS (RESEARCH AND UNIVERSITIES)**

(Not applicable to this contract)

**4.46 PATENTS AND COPYRIGHTS**

All services, information, computer program elements, reports and other deliverables which may be patented or copyrighted and created under this CONTRACT are the property of the State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

**4.47 PATENTS AND COPYRIGHTS (RESEARCH AND UNIVERSITIES)**

(Not applicable to this contract)

**4.48 FEDERAL IMMIGRATION AND NATIONALITY ACT:**

1. General: The consultant, including all subconsultant, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain

the right to perform random audits of consultant and subconsultant records or to inspect papers of any employee thereof to ensure compliance.

2. **Compliance Requirements:** By submission of a proposal, the consultant warrants that the consultant and all proposed subconsultants are and shall remain in compliance with all federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract. The State may, at its sole discretion, require evidence of compliance from the consultant shall have ten working days from the receipt of the request to supply adequate information.

The Department will accept, as evidence of compliance, a showing by the consultant or subconsultant that it has followed the employment verification provisions of the Federal Immigration and Nationality Act as set forth in Sections 274A and 274B of that Act, including implementation of regulations and agreements between the Department of Homeland Security and the Social Security Administration's verification service.

The Consultant shall include the provisions of Subsection 4.30 in all its subcontracts.

3. **Sanctions for Non-Compliance:** Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. The Department will reduce the consultant's compensation by \$10,000 for the initial instance of non-compliance by the consultant or subconsultant. Should the same consultant or subconsultant commit subsequent violations within a two-year time period from the initial violation, the consultant's compensation will be reduced by \$50,000 for each violation. The third instance by the same consultant or subconsultant within a two-year period may result, in addition to the \$50,000 reduction in compensation, in removal of the offending consultant or subconsultant, suspension of work in whole or in part or, in the case of a third violation by the consultant, termination of the contract for default. In addition, the Department may debar a consultant or subconsultant who has committed three violations within a two-year period for up to one year. For purposes of this paragraph, a violation by a subconsultant does not count as a violation by the consultant.

Any delay resulting from a sanction under this subsection is a non-excusable delay. The consultant is not entitled to any compensation or extension of time for any delays or additional costs resulting from a sanction under this subsection.

**An example of the sanctions under this subsection is presented in the following table:**

Offense by:			Reduction in Compensation
Consultant	Subconsultant A	Subconsultant B	
First			\$10,000
	First		\$10,000
	Second		\$50,000
		First	\$10,000
	Third		\$50,000 *
* May, in addition, result in removal of the subconsultant and/or debarment of the subconsultant.			

In Witness whereof the parties hereto have executed this agreement as of the day and year first herein written.

FOR THE STATE

ARIZONA DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

By: \_\_\_\_\_  
\_\_\_\_\_  
Title

FOR THE CONSULTANT

FIRM NAME

\_\_\_\_\_  
Date

By: \_\_\_\_\_  
\_\_\_\_\_  
Title